



CV highlights - Georgios B. Giannakis, DTC Director
ECE, McKnight Presidential Chair (November 12, 2018)

I. Teaching and mentoring

- a) Taught 12 graduate and 4 undergraduate classes, and received school-level teaching awards (evaluations consistently above 5/6);
- b) Awarded 45 PhDs in the last 25 years (1.75 per year): 28/44 faculty members; 12/45 under-represented; 10/45 are now IEEE Fellows; plus 33MSc and 15BSc Theses.
- c) Mentored 20 postdocs (14/20 are now faculty members; 6 are now IEEE Fellows).

II. Research, Impact, and Visibility

- a) Technical field award (IEEE level – Fourier Award; inaugural recipient);
- b) Technical achievement awards from the IEEE Signal Processing Society (SPS); and the European Signal Processing (Eurasip) Society;
- c) Nine (9) best journal paper awards from IEEE-SPS and Communication Soc. (ComSoc); highest number of paper awards in SPS; plus 9 conference paper awards;
- d) Highest h-index (134) within SPS and ComSoc; and top 17 across Engineering and Computer Science worldwide. Google Scholar citations exceeding 68,100;
- e) More than 1,160 publications (430 journal+730 conf.), and more than 32 patents issued (pending law suit filed on Nov. 2014, 4-5 may end up having major commercial value).
- f) School-level research awards; ADC Chair and McKnight Presidential Chair, UMN.
- g) Honorary Doctorate Degrees from U. of Patras and U. of Peloponnese, Greece (2018).

III. Funding

- a) Raised as PI or Co-PI more than 16M in 27 years (very high for SPS researchers).
- b) Diverse funding sources (NSF, NIH, DoE, DoD (AFOSR, ARO, ONR), Industry).
- c) Facilitated the research unit he directed (Digital Technology Center (DTC)) to increase funding by a factor of 5 (DTC raised over 30M over the last 10 years).

IV. Leadership roles

- a) Research group (approx. 20 members): 12 Ph.D. students; 4-5 post-docs; 4-5 visitors;
- b) Major professional society posts: BoG, EiC, Tech. Com., and General Conf. Chairs;
- c) Multi-university projects and proposals: ARL-CTA Technical Area Lead; Medium-and Large-size NSF; MURI AFOSR.
- d) Research Center Director: 100 graduate students; 45 affiliated faculty; 12 admin. staff
- e) Board of regents elected member (University of Patras, Greece).

Full CV downloadable from URL: http://www.dtc.umn.edu/s/resources/gg_cv.pdf

CURRICULUM VITAE

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PROFESSIONAL OBJECTIVE

Teaching, research and leadership in the following and related technical areas:

➤ Areas of Expertise

Signal processing, communications and networking, estimation, detection, time-series analysis, and machine learning. Past areas have included: (poly)spectra, wavelets, cyclostationary, and non-Gaussian signal analysis with applications to equalization, sensor arrays and image processing.

➤ Current Research Topics

Data Science, Internet of Things, and Network Science with applications to social, brain, and power networks with renewables.

EDUCATION

1984 - 1986: *Ph.D. in Electrical Engineering*, University of Southern California, Los Angeles, CA

1984 - 1986: *M.Sc. in Mathematics*, University of Southern California, Los Angeles, CA

1982 - 1983: *M.Sc. in Electrical Engineering*, University of Southern California, Los Angeles, CA

1976 - 1981: *5-year Diploma in Electrical & Electronic Engr.*, Ntl. Tech. Univ. of Athens, Greece

PROFESSIONAL EMPLOYMENT HISTORY

2016 - Pres.: *McKnight Presidential Chair*, University of Minnesota (UMN)

2008 - Pres.: *Director*, Digital Technology Center, UMN

2001 - Pres.: *ADC Chair in Wireless Telecomm.*, Dept. of Electrical & Comp. Engr. (ECE), UMN

1999 - 2001: *Professor*, Dept. of ECE, UMN

1998 - 1999: *Director*, Communications, Controls, & Signal Proc. Lab, EE, Univ. of Virginia (UVA)

1997 - 1999: *Professor*, Dept. of Electrical Engr., University of Virginia

1992 - 1996: *Associate Professor*, Dept. of Electrical Engr., University of Virginia

1987 - 1991: *Assistant Professor*, Dept. of Electrical Engr., University of Virginia

1986 - 1987: *Instructor & Research Associate*, EE-Systems Dept., Univ. of Southern Cal. (USC)

1982 - 1986: *Research Assistant*, EE-Systems Department, University of Southern California

1982 - 1985: *Teaching Assistant / Grader*, EE-Systems Dept., University of Southern California

1981 - 1982: *Instructor* for a private educational center, Athens, Greece.

➤ **Courses Taught**

- * ECE 8581, “Estimation and Detection,” S’99, F’99, S’02, S’03, S’04, S’05, S’07, S’08, S’11, S’14, S’15, 3 credit hrs., 15-25 students (UMN)
- * ECE 5542, “Adaptive Signal Processing,” S’01, S’07, 3 credit hrs., 25 students (UMN)
- * ECE 5505, “Wireless Communications,” S’12, 3 credit hrs., 30 students (UMN)
- * ECE 5501, “Digital Communications,” S’00, F’00, F’01, F’03, F’06, F’07, 3 credit hrs., 30 students (UMN)
- * ECE 4541, “Digital Signal Processing,” F’16, 3 credit hrs., 35 students (UMN)
- * EE 814, “Advanced Detection and Estimation,” F’87, 3 credit hrs., 10 students (UVA)
- * EE 793, “Spectral analysis and time series,” F’88, 3 credit hrs., 6 students (UVA)
- * EE 781, “Pattern Recognition,” S’98, 3 credit hours, 8 students (UVA)
- * EE 774, “Statistical Signal Processing,” F’88, S’90, S’92, S’96, 3 credit hrs., 12 students (UVA)
- * EE 712, “Digital Communications,” S’97, 20 students (UVA)
- * EE 676, “Multidimensional Signal & Image Processing,” S’91, S’97, 15 students (UVA)
- * EE 614, “Estimation Theory,” S’90, S’92, 3 credit hrs., 10 students (UVA)
- * EE 576, “Digital Signal Processing,” S’88,89, F’90,91,92,96,97, 3 credit hrs., 35 students (UVA)
- * EE 420, “Communications II,” F’89, F’90, 3 credit hrs., 25 students (UVA)
- * EE 324, “Signals and Systems II,” S’93, S’94, S’95, 3 credit hrs., 60 students (UVA)
- * EE 323, “Signals and Systems I,” F’94, F’95, 3 credit hrs., 55 students (UVA)
- * ENGR203, “Electrical Science I,” S’91, 3 credit hrs., 15 students (UVA)

➤ **New Courses Introduced**

- * EE 793, “Spectral analysis and time series,” F’88 (UVA)
- * EE 687, “Wireless Communications (Lab),” F’97 (UVA)
- * EE 676, “Multidimensional Signal & Image Processing,” F’89 (UVA)
- * EE 614, “Estimation Theory,” F’89, S’96 (UVA)

UNIVERSITY SERVICE

➤ Departmental committees

- ▷ *Preliminary Exam Committee*, F'00, S'01, F'04, F'06, F'07, S'16 (UMN)
- ▷ *Endowed Chair Selection Committee*, F'01, S'02 (UMN)
- ▷ *Faculty Search Committee*, '99-S'00, '00-'01, '01-'02, '03-'04, '06-'07, '09-'10, '16-'17 (UMN)
- ▷ *Industrial Relations Committee*, S'00, F'00, S'01 (UMN)
- ▷ *Graduate Committee*, (chair), F'97, S'98 (UVA); S'12, F'13
- ▷ *IEEE Student Advisor (UVA-EE Chapter)*, F'96, S'97 (UVA)
- ▷ *Eminent Speakers Series*, (chair), F'95, S'96, F'96, S'97 (UVA)
- ▷ *Chairman's Search Committee*, (member), F'95, S'96 (UVA)
- ▷ *Graduate Committee*, (member), F'91, S'92, F'92, F'94, F'96 (UVA)
- ▷ *Doctoral Exam Ad hoc Committee*, (chair), F'94 (UVA)
- ▷ *Computer Equipment Committee*, (member), F'88, S'89, F'89, F'90, S'91, F'91, F'94 (UVA)
- ▷ *Personnel Committee*, (member), F'88, S'89, F'89, S'90, F'90, S'91, F'91, S'92 (UVA)
- ▷ *Undergraduate Committee*, (member), S'88 (UVA), S'16 (UMN)
- ▷ *Graduate Student Advisory Committees*: 50 (as chairman or member), 25 (as advisor) (UVA/UMN)

➤ School of Engineering committee

- ▷ *CSE Promotion and Tenure Advisory Committee*, S'16 (UMN)
- ▷ *Endowed Chair Search Committee*, Digital Technology Center, F'01, S'02, chair; F'02, S'03, S'04 member (UMN)
- ▷ *By-laws Committee*, S'94, F'94 (UVA)

➤ International Committees

- ▷ *Member* of the Ph.D. Thesis Committee, KAUST, Saudi Arabia, 2017
- ▷ *Co-Advisor* and member of a Ph.D. Thesis in Univ. of Padova, Italy, 2010
- ▷ *Co-Advisor* and member of two Ph.D. defenses in Carlos III Univ., Madrid, Spain, 2006 and 2007
- ▷ *Juror* of a Ph.D. defense in Telecom, Paris, France, June 2001
- ▷ *Opponent* for a PhD defense in KTH, Stockholm, Sweden, November 1998
- ▷ *Member* of a Ph.D. Thesis Committee, Univ. of Cergy Pontoise, France, October 1998

- ▷ *Member* of an Assist. Prof. Election Committee in Telecom, Paris, France, October 1998
- ▷ *Reader* of a Ph.D. Thesis, Grenoble, France, 1995
- ▷ *Reader* of a Ph.D. Thesis, IIT, Madras, India, 1994

PROFESSIONAL ACTIVITIES

➤ Major IEEE Activities

- ▷ *Member* of the Nominations & Appointments Cmt., IEEE Signal Proc. Soc. (term: 01/16 - 12/17)
- ▷ *Member* of the Editorial Board for IEEE J. on Special Topics in Signal Proc. (term: 01/16 - 12/17)
- ▷ *Chair* of the Technical Committee on Signal Processing for Communications, IEEE Signal Processing Society (term: 05/98 - 12/01)
- ▷ *Member & Secretary* of the Steering Committee for the IEEE Transactions on Wireless Communications (term: 05/01 - 01/06)
- ▷ *Editor-in-Chief* for the IEEE Signal Processing Letters (term: 01/00 - 01/02)
- ▷ *Member* of the IEEE Fellow Election Committee (term: 06/99 - 06/02)
- ▷ *Member* of the Editorial Board, Proceedings of the IEEE (term: 01/00 - 01/03)
- ▷ *Member-at-Large*, Board of Governors, IEEE Signal Processing Society (term: 01/01-12/04)
- ▷ *Member* of the Publications Board, IEEE Signal Processing Society (term : 02/96 - 01/02)
- ▷ *Member & Vice Chair* of the Statistical Signal & Array Processing Committee (term: 05/91 - 03/98)
- ▷ *Associate Editor* for the IEEE Transactions on Signal Processing (Area: Spectrum Estimation & Modeling; term : 03/91 - 03/93)
- ▷ *Associate Editor* for the IEEE Signal Processing Letters (Area : Statistical Signal Processing, 1st term: 06/95 - 06/98; 2nd term: 07/98-07/2001)
- ▷ *Secretary & Member* of the Conference Board, IEEE Signal Processing Society (term: 06/95 - 06/98)
- ▷ *Co-organizer & lead guest editor* (with C. Cendrillon, V. Cevher, A. Swami, and Z. Tian) of the Special Issue on “Signal Processing for Big Data,” IEEE Journal on Special Topics in Signal Processing, June 2015.
- ▷ *Co-organizer & lead guest editor* (with F. Bach, C. Cendrillon, M. Mahoney, and J. Neville) of the Special Issue on “SP for Big Data,” IEEE Signal Processing Magazine, September 2014.
- ▷ *Co-organizer & guest editor* (with N. Al Dahir, B. Hochwald, B. Hughes, and T. Marzetta) of the Special Issue on “Signal Processing Techniques for Space-Time Coded Transmissions,” IEEE Transactions on Signal Processing, October 2002.
- ▷ *Organizer & guest editor* of the Special Issue on “Signal Processing Advances in Wireless and Mobile Communications,” IEEE Signal Processing Magazine, May 2000.

- ▷ *Organizer & guest editor* of the “50th Anniversary of Signal Processing Series: Highlights of Signal Processing for Communications,” IEEE Signal Processing Magazine, March 1999.
- ▷ *Organizer & guest co-editor* (with G. Xu) of the Special Issue on “Signal Processing for Advanced Communications,” for the IEEE Transactions on Signal Processing, January 1997.
- ▷ *Organizer & guest co-editor* (with A. Swami) of the Special Issue on “Higher-order Statistics,” for the Signal Processing Journal, EURASIP, August 1996.
- ▷ *Organizer & guest editor* of the Special Issue on “Adaptive Signal Processing using Higher-Order Statistics,” for the Intl. J. of Adaptive Control and Signal Processing, Wiley, March 1996.

➤ **Plenary, Keynote, and Tutorial Talks**

- ▷ **Plenaries in 2018:** 7th Spanish Workshop on Signal Processing, Communication and Information Theory San Sebastian, Spain, Jan. 22-23, 2018; ShanghaiTech Workshop on Information, Learning, and Decision (SWILD), June 30-July 1, 2018; IEMCON, Vancouver, Canada, Nov. 2, 2018; Globalsip Conf., Anaheim, CA, Nov. 27, 2018; Tutorials in 2018: MILCOM Conf., Los Angeles, CA, Oct. 28-31, 2018; Globecom Conf., Abu Dhabi, UAE, Dec. 9-13, 2018.
- ▷ **Plenaries in 2017:** 3rd Symp. U. of Florida Informatics Inst., Gainesville, FL, March 16, 2017; ACCESS Dist. Lecture Series, Stockholm, Sweden, May 16, 2017; Workshop on Compressive Sensing and Applications, Budva, Montenegro, May 26, 2017; 1st Intl. Balkan Conf. on Communications and Networking Tirana, Albania, May 30, 2017; Trans-Atlantic Symposium on Technology and Policy for a Smart Society Minneapolis, MN, June 19, 2017; 17th Intl. Symp. on Comm. and Infor. Technologies (ISCIT), Cairns, Australia, September 25-27, 2017. Tutorials in 2017: BigDat2017, Bari, Italy, Feb. 16-17, 2017; CAMSAP Workshop, Curacao, Dutch Antilles, December 10-13, 2017.
- ▷ **Plenaries in 2016:** Ntl. Renewable Energy Lab (NREL), Golden, CO, Jan. 26-28, 2016; Intl. Conf. on Comp., Networking and Comm. (ICNC), Kauai, Hawaii, Feb. 15-18, 2016; Intl. Workshop on Signal, Array, and Comm. (IWSAC), Xi’an, China, March 2016; SPAWC, Edinburg, Scotland, July 3-6, 2016; STATOS, Budapest, Hungary, Sept. 2, 2016; Globalsip, Washington DC, Dec. 7-9, 2016; Tutorials in 2016: SPAWC, Edinburg, Scotland, July 3-6, 2016;
- ▷ **Plenaries in 2015:** Conf. on Information Sciences and Systems, John Hopkins Univ., Baltimore, March 18-20, 2015; Center for Advanced Signal and Image Sciences, Lawrence Livermore Ntl. Lab, May 13, 2015; Tutorials in 2015: CTTC, Barcelona, Spain, Oct. 26-27, 2015; Intl. Conf. of Acoust. Speech and Signal Proc., Gold Coast, Australia, April 19-24, 2015; EUSIPCO, Nice, France, Aug. 31-Sept. 4, 2015.
- ▷ **Plenaries in 2014:** Signal Processing Algorithms and Applications (SPA), Poznan, Poland, Sept. 22-24, 2014; Intl. Conf. on Wireless Communications and Signal Processing (WCSP), Hefei, P. R. China, Oct. 23-25, 2014; Asilomar Conf. on Signals, Systems, and Computers, Pacific Grove, CA, Nov. 2-5, 2014; GlobalSIP, Atlanta, GA, Dec. 3-5, 2014 (keynote). Tutorials in 2014: Intl. Conf. of Acoust. Speech and Signal Proc., Florence, Italy, May 4-9, 2014; Sensor Array and Multichannel(SAM) SP Workshop, A Coruna, Spain, June 22-25, 2014; IEEE-SPS Summer School on Signal Processing and Machine Learning for Big Data, Vancouver, CA, July 29-31, 2014; EUSIPCO, Lisbon, Portugal, Sept. 1-5, 2014.

- ▷ **Plenaries in 2013:** Intl. Workshop on Cross-Layer Designs, Qingdao, P. R. China, October 27-28, 2013; 10th Intl. Symp. on Wireless Comm. Systems, TU Ilmenau, Germany, Aug. 27-30, 2013; Intl. Black Sea Conf. on Communications and Networking, Batum, Georgia, July 3-5, 2013; and STATOS: Statistics, Optimization, and Signal Processing Meeting, Darmstadt, June 15-16, 2013. **Tutorials in 2013:** Intl. Conf. of Acoust. Speech and Signal Proc., Vancouver, Canada, May 26-31, 2013; Intl. Conf. on Communications, Budapest, June 9-13, 2013; EUSIPCO, Marrakech, Morocco, September 9-13, 2013; GLOBECOM Conference, Atlanta, December 9-13, 2013; and CAMSAP Workshop, St. Martin, December 15-18, 2013.
- ▷ **Plenaries in 2012:** 2nd Greek SP Jam, Thessaloniki, Greece, May 2012; Intl. Work. on Math. Issues in Info. Sciences (MIIS), Xi'an, China, July 2012; 3rd IFAC Work. on Distr. Estimation and Control in Networked Systems, Santa Barbara, CA, Sept. 2012.
- ▷ **Plenary in 2011:** National URSI Symposium, Madrid, Spain, Sept. 2011.
- ▷ **Plenaries in 2010:** Australian Communication Theory Symposium (AusCTW), Canberra, Australia, Feb. 2010; Intl. Conf. on Telecommunications (ICT), Doha, Qatar, April 2010; Cognitive Information Processing (CIP), Elba, Italy, June 2010; Signal Proc. Advances in Wireless Communications (SPAWC), Marrakech, Morocco, June 2010; Wireless Advanced Symposium, London, UK, July 2010. **Tutorials in 2010:** Intl. Conf. on Telecommunications (ICT), Doha, Qatar, April 2010; and Intl. Conf. on Communications (ICC), Cape Town, South Africa, May 2010.
- ▷ **Plenaries in 2008:** EE-PanIranian Conf., Tehran, Iran, June 2008; Intl. Conf. on Communications (ICC), Beijing, PRC, June 2008; ISABELE Conf., Aalborg, Denmark, Oct. 2008; and Intl. Conf. on Electronics Engr. (ICEE), Mexico City, Mexico, Oct. 2008. **Tutorials in 2008:** Intl. Conf. on Acoust., Speech, and Signal Proc. (ICASSP), Las Vegas, May 2008.
- ▷ **Plenaries in 2007:** SIU Signal Proc. and Comm. Applications Conf., Eskisehir, Turkey, June 2007; URSI Intl. Symp. on Signals, Systems and Electronics, Montreal, Canada, July 2007; Intl. Workshop on Advances in Wireless Sensor Networks, Philadelphia, PA, August 2007; EUSIPCO, Poznan, Poland, September 2007; Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing, St. Thomas, U.S. Virgin Islands, Dec. 2007. **Tutorials in 2007:** Intl. Conf. on Communications, Glasgow, UK, June 2007; also at the Intl. Conf. on Acoust. Speech and Signal Proc., Honolulu, Hawaii, April 2007; and at Univ. of Santa-Fe, Argentina, March 2007.
- ▷ **Plenary in 2006:** Last Mile Wireless Workshop, Dublin, Ireland, August 2006. **Tutorials in 2006:** A-Star, Singapore, March 2006; Intl. Conf. Ultra-Wideband Comms., Waltham, MA, Sept. 2006.
- ▷ **Tutorials in 2005:** Intl. Conf. on Communications, Seoul, Korea, May 2005.
- ▷ **Plenaries in 2004:** IEEE Intl. Conf. on Electronic Design, Veracruz, Mexico, November 2004; and IASTED Conf., Hawaii, August 2004. **Tutorials in 2004:** Globecom Conf., Dallas, TX, Dec. 2004; Vehicular Tech. Conf., Los Angeles, CA, Sept. 2004; Intl. Conf. on Acoustics, Speech and Signal Processing, Montreal, Quebec, Canada, May 2004; and Wireless Comm. and Networking Conf., Atlanta, GA, March 2004.
- ▷ **Plenaries in 2003:** Intl. Symp. on Signal Proces. and Info. Technology, Darmstadt, Germany, Dec. 2003; 6th Baiona Workshop on Signal Proc. in Communications, Baiona, Spain, Sept. 2003; Signal Proc. Advances in Wireless Communications Workshop, Rome, Italy, June 2003; and Intl. Conf.

on Acoust. Speech, and Signal Processing, Hong Kong, April 2003 (never delivered because meeting was cancelled due to SARS). Tutorials in 2003: Conf. on Ultra Wideband Systems and Technologies, Reston, Virginia, Nov. 2003; MILCOM Conf., Boston, MA, October 2003; and Vehicular Tech. Conf., Orlando, FL, October 2003.

- ▷ Plenary in 2002: Sensor Array and Multichannel Processing Workshop, Washington DC, on Aug. 2002. Tutorials in 2002: Intl. Conf. on ASSP, Orlando, FL, May 2002; and Wireless Communications and Networking Conf., Orlando, FL, March 2002.
- ▷ Plenary in 2001: Statistical Signal Processing Workshop, Singapore, August 2001. Tutorials in 2001: GLOBECOM Conf., San Antonio, TX, Nov. 2001; Army Research Laboratory, Adelphi, MD, May 2001; and Intl. Conf. on Acoust., Speech, and Signal Proc., Salt Lake City, Utah, May 2001.
- ▷ Keynote address on “Single- and Multi-User Multi-Carrier Communications,” Balkan Workshop on Signal Processing and Communications, Isik Univ., Istanbul, Turkey, June 2000.
- ▷ Plenary talk on “Cyclostationary Signal Processing: An Overview,” (Sunuhara Plenary Lecture), at the 10th Symposium on System Theory and Statistics, Kyoto, Japan, November 1998.
- ▷ Expert-Summary talk on “Statistical Signal and Array Processing,” papers presented at the Intl. Conf. on Acoust., Speech, and Signal Proc., Munich, Germany, April 1998.
- ▷ Plenary talk on “High-Order Cyclostationary Signal Processing,” at the 5th IEEE-SP Workshop on Higher-Order Statistics, Banff, Alberta, Canada, July 1997.
- ▷ Tutorial on “Theory and Applications of Cyclostationary Signal Analysis,” at the Intl. Conf. on Acoust., Speech, and Signal Proc., Adelaide, Australia, April 1994.
- ▷ Keynote address on “HOS based linear system identification: basic advances and future directions,” ATHOS-ESPRIT Workshop on System Identification and Higher-Order Statistics, Sophia Antipolis, France, September 1993.

➤ **Consulting and Short Courses**

- ▷ Consulted for TRW, CA, 1994; Amoco, OK (1996-1998); Globespan (2000-2001); CalAmp (2002), ATC (2003); Inter-Digital (2004), and WiAV Solutions, LLC (2009-10); Dorsey & Whitney LLC, Law Firm (2011-12), Schwegman, Lundberg & Woessner, P.A. (2014).
- ▷ Taught an one-day short course on “Signal processing with higher-order spectra,” Mitre Corp., Boston, MA, June 1991; E-Systems, College Station, PA, June 1992.

➤ **Professional Society Memberships**

- ▷ Institute of Electrical Electronic Engineers (IEEE), Student Member 1984-1986, Member 1986-1991, Senior Member 1991-1996, Fellow Member 1996-present.
- ▷ IEEE Communications Society, 1999-present.
- ▷ IEEE Information Theory Society, 1990-present.
- ▷ IEEE Signal Processing Society, 1984-present.

- ▷ European Association for Signal Processing (EURASIP), Member, 1990-present
- ▷ Institute of Mathematical Statistics (IMS), Member, 1987-present
- ▷ Technical Chamber of Greece, and Greek Association of Electrical and Electronic Engineers, Member, 1981-present
- ▷ Geophysics, Associate Member, 1984-1989
- ▷ Eta Kappa Nu, Member, 1984-present

➤ **Conference Organization - General Chairmanships**

- ▷ *General Co-Chair* (with Geert Leus, TU Delft, and Antonio Marques, URJC, Spain) of *IEEE Data Science Workshop (DSW)*, Minneapolis, MN, USA, June 2-5, 2019;
- ▷ *General Co-Chair* (with Cher Wang and Xiliang Luo, ShanghaiTech) of *ShanghaiTech Workshop on Information, Learning, and Decision (SWILD)*, Shanghai, P. R. China, June 30-July 1, 2018; see URL <http://sist-swild.shanghaitech.edu.cn/2018/>
- ▷ *General Co-Chair and Co-Organizer* (with S. Dhople and S. Low, Caltech) of the NSF-sponsored *Workshop on Computing, Control, and Signal Processing Challenges in Future Power Systems*, Arlington, VA, November 15-16, 2013; see URL <http://www.dtc.umn.edu/seminars/>
- ▷ *General Co-chair and Co-organizer* (with N. Sidiropoulos, and M. Kaveh as Honorary Chair) of the *Statistics, Optimization, and Signal Processing (STATOS) Workshop in memory of Prof. Alex B. Gershman*, Darmstadt, Germany, June 15-16, 2013.
- ▷ *Co-Organizer/Steering Committee* (with N. Sidiropoulos as General Chair) of the NSF-sponsored *Workshop on Big Data: From Signal Processing to Systems Engineering*, Arlington, VA, March 21-22, 2013; see URL <http://www.dtc.umn.edu/bigdata/>
- ▷ *General Co-chair and Co-organizer* (with H. Delic) of the 13th IEEE Workshop on Signal Processing Advances in Wireless Communications, Cesme, Turkey, June 17-20, 2012.
- ▷ *Technical Committee Chair*, 32nd Annual Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 1998.
- ▷ *General Co-Chairman and Co-organizer* (with L. Tong and J.-F. Cardoso) of the 1st IEEE Workshop on Signal Processing Advances in Wireless Communications, Paris, France, April 16-18, 1997.
- ▷ *General Co-Chairman and Co-Organizer* (with A. Swami), 8th Statistical Signal and Array Processing Workshop, Corfu, Greece, June 24-26, 1996.
- ▷ *General Co-Chairman and Co-Organizer* (with A. Swami), IEEE Signal Processing Workshop on Higher-Order Statistics, Lake Tahoe, CA, June 1993.

➤ Conference Committee Memberships

- ▷ Member of Intl. Scientific Com., *3rd Workshop on Signal Processing Advances in Wireless Communications*, Taiwan, March 2001.
- ▷ Member of Intl. Scientific Com., *Workshop on Statistical Signal and Array Processing*, Poconos, Pennsylvania, August 2000.
- ▷ Member of Intl. Scientific Com., 3rd Intl. IMACS Conf. on Circuits, Sys., Com., and Computers, Athens, Greece, July 4-8, 1999.
- ▷ Technical Area Coordinator, 31st Asilomar Conf. on Signals, Systems, and Computers, Pacific Grove, Monterey, CA, November 2-5, 1997.
- ▷ Member of the Intl. Advisory Board, Intl. Conf. on Information, Communications, and Signal Proc., Singapore, September 9-12, 1997.
- ▷ Member of the Scientific Committee, European Conf. on Signal Analysis and Prediction, Prague, Czech Republic, June 1997.
- ▷ Member of the Technical Committee, 4th Intl. Symposium on Signal Proc. and its Applications, Gold Coast, Australia, August 24-26, 1996.
- ▷ Member of Program Committee, SPIE Conf. on Wavelet Applications in Signal and Image Processing IV, Denver, CO, August 4-9, 1996.
- ▷ Member of the Intl. Program Committee, Inaugural Symposium of the Intl. Inst. for General Systems Studies, Slippery Rock, PA, July 13-15, 1995.
- ▷ Member of the Intl. Tech. Program Committee, Intl. Conf. on Digital Signal Proc., Limassol, Cyprus, June 26-28, 1995.
- ▷ Member, Technical Committee, 27th Asilomar Conference, on “Signals, Systems, and Computers,” Pacific Grove, CA, Nov. 1993.
- ▷ Member, Steering Committee (Publications Chairman), Workshop on Higher-Order Spectral Analysis, Vail, Colorado, June 1989.
- ▷ Organizer, Session FP2 on “Cumulants in Signal Processing and System Identification,” American Control Conference, Atlanta, Georgia, June 1988.

➤ Conference Session Chairmanships

- ▷ More than 250 (1987-present)

➤ Reviewer Activities

Proceedings of the IEEE - IEEE Trans. on Info. Theory - IEEE Trans. on Wireless Communications
 IEEE Transactions on Communications - Wireless Communications and Mobile Computing
 IEEE Journal on Selected Areas in Communications - IEEE Transactions on Signal Processing

IEEE Transactions on Speech Processing - IEEE Transactions on Image Processing

IEEE Transactions on Automatic Control - IEEE Transactions on Circuits and Systems

IEEE Transactions on Geoscience and Remote Sensing - Geophysics

International Journal of Adaptive Control and Signal Processing - Automatica

Signal Processing (EURASIP) - Multidimensional Systems and Signal Processing

Annals of Mathematical Statistics - Journal of Time Series Analysis

IEE Proceedings, Part F (Radar and SP)

- ▷ National Science Foundation - Army Research Office (reviewer for approx. six proposals/year)
- ▷ National Institutes of Health, Oct. 13-15, 1993 (committee member for the review of the Biomedical Engr. and Instrumentation Program, NCRR).
- ▷ ONR/NSF Workshop on Signal Processing for Manufacturing and Machine Monitoring, March 12-15, 1996 (invited participant to report on emerging signal processing basic research concepts that support machine monitoring).
- ▷ NSF-CAREER Panelist for MIPS - Signal Processing Systems Program, November 1997; and November 2000 (reviewed 12 proposals in signal processing for communications subjects per year).
- ▷ NSF Panelist for CISE/CCR; Communications Program (1999, 2000); and Major Research Infrastructure Proposals (2000).
- ▷ Reviewer for: International Science Foundation of Israel (3 proposals), Science Council of Hong-Kong (2 proposals), and the Australian Research Council (4 proposals).
- ▷ Book review 1 : “Lessons in Digital Estimation Theory,” by J. M. Mendel, Prentice-Hall, 1987 (review appeared in Automatica, 1989).
- ▷ Book review 2 : Review on the first edition of “Signals and Systems,” by A. Oppenheim, and A. Willsky, Prentice-Hall, 1983 (review requested in preparing the second edition of the book).
- ▷ Book review 3 : Review of “Analog and Digital Signal Processing,” by H. Baher, John Wiley and Sons, 1990.

HONORS and AWARDS

- ☆ *Honorary Doctorate*, Dept. of Computer Engr. & Informatics, and the Dept. of ECE, Polytechnic School, University of Patras, Greece (2018).
- ☆ *Honorary Doctorate*, Dept. of Informatics & Telecommunications, University of Peloponnese, Tripoli, Greece (2018).
- ☆ *IEEE Signal Processing Society’s Paper Award*, 2018, (awarded to co-author M. Mardani) for the paper published in the May 2015 issue of the IEEE Trans. on Signal Processing.

- ☆ *McKnight Presidential Chair*, ¹ University of Minnesota (2016)
- ☆ *Technical Field Award - IEEE Fourier Award*, (2015)² Inaugural recipient worldwide “For contributions to the theory and practice of statistical signal processing with applications to wireless communications.”
- ☆ *Board of Regents*, University of Patras, Greece; elected member (2013-2016).
- ☆ *IEEE Signal Processing Society’s Best Paper Award*, 2011; for the paper (co-authored with P. Xia) that was published in the May 2006 issue of the IEEE Transactions on Signal Processing.
- ☆ *EURASIP’s Best Paper Award*, 2009; for the paper (co-authored with P. Anghel and Z. Wang) that was published in the February 2005 issue of the Journal for Applied Signal Processing.
- ☆ *Fellow of the European Association of Signal Processing (EURASIP)*, 2008; the association’s most prestigious honor to recognize outstanding achievements of its members and volunteers.
- ☆ *Highly Cited Researcher*, included in the Thomson ISI Web of Knowledge List of Highly Cited Researchers in Comp. Science and Engrg., 2007; with an **h-index=134** (top in the IEEE Signal Processing Society; and top twenty across Eng. and Comp. Sci. authors worldwide).
- ☆ *Distinguished Lecturer of the IEEE*, Signal Processing Society, 2006-2008. Invited by 20 chapters worldwide to deliver lectures on multi-carrier, ultra-wideband and space-time coded wireless communications, and distributed estimation-detection using wireless sensor networks.
- ☆ *Technical Achievement Award*, The European Association for Signal, Speech and Image Processing (EURASIP), 2005. This is the highest award given to an individual by EURASIP in recognition of fundamental contributions to the advancement of science.
- ☆ *G. W. Taylor Award for Distinguished Research*, Information Technology, University of Minnesota, 2004; “For outstanding contributions to telecommunications, including wireless systems and networks”.
- ☆ *IEEE Signal Processing Society’s Technical Achievement Award* ³, 2000, “For fundamental contributions to non-Gaussian and non-stationary signal analysis, system identification, and equalization of single- and multi-user communication systems.”
- ☆ *IEEE Communications Society’s Guglielmo Marconi Prize Paper Award*, 2004; for the paper (co-authored with Ph.D. students Y. Xin and Z. Wang) that was published in the March 2003 issue of the IEEE Transactions on Wireless Communications.
- ☆ *IEEE Signal Processing Society’s SP Magazine Best Paper Award*, 2003; for the paper (co-authored with Ph.D. student Z. Wang) that was published in the May 2000 issue of the IEEE Signal Processing Magazine.

¹Presidential Endowed Chair acknowledges the critical contributions of important University faculty who have distinguished themselves and their departments in the missions of research, education and public engagement; see also <https://twin-cities.umn.edu/news-events/georgios-giannakis-awarded-prestigious-mcknight-presidential-endowed-chair>

²Selection criteria: Impact on the field of signal processing technology, including innovation; leadership; and seminal contributions as evidenced by publications or patents or transition to practice.

³Honors a person who, over a period of years, has made outstanding technical contributions to the theory and/or practice in technical areas within the scope of the IEEE-SP Society, as demonstrated by publications, patents, or recognized impact on the field.

- ☆ *IEEE Signal Processing Society's Best Paper Award*, 2001; for the paper (co-authored with N. Sidiropoulos and R. Bro) that was published in the August 2000 issue of the IEEE Transactions on Signal Processing.
- ☆ *IEEE Signal Processing Society's Best Paper Award*, 2000; for the paper (co-authored with A. Scaglione and S. Barbarossa) that was published in the July 1999 issue of the IEEE Transactions on Signal Processing.
- ☆ *Asilomar Conference Appreciation Plaque* for Technical Service, 2000.
- ☆ *Board of Governors*, IEEE SP Society, elected member (2001-2004).
- ☆ *Editorial Board* of the Proceedings of the IEEE, elected member (2000-2003).
- ☆ *IEEE Fellow Election Committee*, elected member (1999-2002).
- ☆ *IEEE Signal Processing Society's Paper Award*, 1998, (under 30 years old category; awarded to co-author M. K. Tsatsanis) for the paper published in the August 1995 issue of the IEEE Transactions on Signal Processing.
- ☆ *IEEE Fellow*, 1996-97, "For contributions to System Identification and Statistical Signal Processing."
- ☆ *IEEE Signal Processing Society's Young Author Paper Award*, 1992, for the paper (co-authored with J. M. Mendel) published in the March 1989 issue of the IEEE Transactions on Acoustics, Speech, and Signal Processing.
- ☆ *Outstanding Young Faculty Teaching Award*, Department of Electrical Engineering, University of Virginia, 1992.
- ☆ *Institutional Junior Faculty Research Award*, School of Engineering, University of Virginia, 1988.
- ☆ *Best Conference Paper Award* in Identification Session, American Control Conference, 1986 and 1988.
- ☆ *Best Student Paper Awards* (8 in the last 8 years) won by student co-authors in Wireless Symposium, ICASSP, CROWNCOM and Asilomar Conferences.
- ☆ *City of Corinth excellence award* for top grade in 1976 Entrance Examination of Greek Universities.

STUDENT ADVISING

➤ Completed Ph.D. Theses

1. J. M.-M. Anderson, "One- and two-dimensional system identification using higher-order statistics," May 1992; with the Dept. of Electrical Engr., University of Florida, Gainesville, FL (**Associate Professor**; received NSF-Career Award, 1996); now with Howard Univ. (**Professor**);
2. M. K. Tsatsanis, "On Wavelets and Time-Varying Systems," September 1992; formerly with the Dept. of Electrical Engr., Stevens Institute of Technology, N.Y. (**Associate Professor**; received NSF-Career Award, 1998); Chief Tech. Officer with Voyan Technologies Inc., CA; *co-founder* of Aktino Inc., Irvine, CA; now with Entropic Communications, San Diego, CA; **IEEE Fellow**).

3. B. Sadler, “Polyspectral Techniques for Detection and Estimation in Gaussian and non-Gaussian noise,” December 1992; now with the US Army Lab (**ARL Fellow** and **IEEE Fellow**), Adelphi, MD, and the Johns Hopkins Univ. Whiting Institute (Instructor).
4. A. Dandawate, “Exploiting Cyclostationarity and Higher-Order Statistics in Signal Processing,” January 1993; now with **Intel Corp.**, NJ.
5. S. Shamsuder, “Array and Multichannel Signal Processing using Higher-Order and Cyclic Statistics,” November 1993; formerly with the Dept. of Electrical Engr., Colorado State University, Fort Collins, CO (**Assistant Professor**); **Lucent Tech.**; now with **Verizon, Executive Director of 5G Planning**.
6. T. E. Hall, “Estimation and Validation of Image Models using Higher-Order Statistics with Applications to Textures,” August 1994; now with the Information Technology & Communications Center, University of Virginia, Charlottesville, VA (**Consultant** for scientific computing).
7. G.-T. Zhou, “Random Amplitude and Polynomial Phase Modeling of Non-Stationary Processes using High-Order and Cyclic Statistics,” November 1994; now with the School of Electrical Engr., Georgia Tech., Atlanta, GA; **Professor**; received NSF-Career Award, 1997; **IEEE Fellow**.⁴⁵
8. S. D. Halford, “Blind Channel Equalization for Wireless Communications,” November 1996; now with Intersil Corporation, Palm Bay, FL (**Research Engineer**).
9. E. Serpedin, “Blind Equalization of Linear and Nonlinear Volterra Channels using Transmitter or Receiver Diversity,” December 1998; now with the Dept. of ECE, Texas A&M University (**Professor**; received NSF-Career Award, 2000; **IEEE Fellow**).
10. A. Stamoulis, “Integrated Services in Wireless Networks with Jointly Designed Physical, Data, and Network Layers,” December 2000; was with the ATT Shannon Labs; now with Qualcomm (**Research Engineer**).
11. A. Scaglione, “Filterbank Precoding in Communications,” U. of Rome, Italy; co-advised with prof. S. Barbarossa; formerly with Cornell University and UC Davis (**Professor**; now with Arizona State University; received NSF-Career Award 2001; **IEEE Fellow**).
12. C. Tepedelenlioglu, “Modeling and Mitigation of Time- and Frequency-Selective Fading in Single- and Multi-Carrier Communications,” May 2001; now with the Arizona State University (**Professor**; received NSF-Career Award 2001).
13. Z. Liu, “Space-Time Coding for Broadband Wireless Communication Systems,” November 2001; formerly with the University of Iowa (**Assistant Professor**); now with the National Research Lab., Washington, DC.
14. Z. Wang, “Linear Precoding in Wireless Communication Systems,” April 2002; (**Professor**), now with Iowa State University (**IEEE Fellow**).
15. S. Zhou, “Chip-Interleaving and Space-Time Coding for Wireless” May 2002;⁶ **Professor**, now with the University of Connecticut (**IEEE Fellow**).

⁴Received the School of Engr. and Applied Sciences, Allan Talbott Gwathmey Memorial Research Award, Univ. of Virginia, April 1995.

⁵Received NSF Fellowship to attend Summer Program in Japan, June-August 1995.

⁶Won the ONR Young Investigator Award, 2007; PECASE Award, 2008

16. Y. Xin, “Space-Time Coding with Linear Constellation Precoding” April 2003; formerly with the National University of Singapore (**Assistant Professor**); then NEC, Samsung; now with Futurewei, NJ.
17. X. Ma, “Doubly-Selective Fading Channels: Estimation, Capacity, and Space-Time Coding,” May 2003; **Professor** now with Georgia Inst. of Technology (**IEEE Fellow**).
18. L. Yang, “Ultra-Wideband Wireless Communications: From Concept to Reality,” June 2004; ⁷ Formerly with the University of Florida, Gainesville (**Professor**; received NSF-Career Award, 2009); now with Colorado State University **IEEE Fellow**).
19. W. Zhao, “Space-Time Coding and Low-Complexity Decoding for Coherent and Non-Coherent MIMO Communications,” May 2005; now with Qualcomm, CA (**Research Engineer**).
20. P. Xia, “Multi-Input Multi-Output Communications with Partial Channel State Information,” July 2005; formerly with Samsung Inc., CA; Broadcom; now with Huawei Tech. (**Research Engineer**); and with Tongji Univ., P. R. China (**Professor**).
21. R. Wang, “Distributed Coding for Multi-Source Cooperative Networks,” March 2006; now with Qualcomm, CA (**Research Engineer**).
22. Q. Liu, “Cross-Layer Design and Modeling for Wireless Communication Networks,” April 2006; Navini Networks Inc., Dallas, TX; formerly with PureWave Networks, (**Research Engineer**); now with Tongji Univ., P. R. China (**Professor**).
23. X. Luo, “Synchronization and (De-) Modulation for Ultra-Wideband Access,” May 2006; was with Qualcomm, CA (**Senior Staff Engineer**); now with Shanghai Tech., P. R. China (**Assoc. Professor**).
24. A. Cano, “Differential Modulation for Wireless Collocated and Distributed MIMO Systems,” June 2006 (co-advised with Prof. Javier Ramos, Univ. of Madrid, Spain); ⁸ formerly with Rey-Juan Carlos Univ., Spain (**Assistant Professor**); then Broadcom, and now with Metronic (**Research Engineer**).
25. A. Ribeiro, “Wireless Cooperative Communications and Networking,” January 2007; now with the University of Pennsylvania (**Professor**; received NSF-Career Award, 2010).
26. A. Garcia-Marques, “Power-Efficiency Wireless Communications and Sensor Networks,” February 2007 (co-advised with Prof. Javier Ramos, Univ. of Madrid, Spain); now with Rey-Juan Carlos University, Madrid, Spain (**Associate Professor**).
27. Y. Yu, “Cross-Layer Medium Access and Congestion Control for Wireless Networks,” May 2007; was with Qualcomm, CA; now with Samsung, CA (**Senior Staff Engineer**).
28. T. Wang, “Complex-Field Network Coding in High-Throughput Anti-Jam Wireless Networks,” August 2008; was with Seagate, MN (**Research Engineer**); now with Pillsbury Winthrop Shaw Pittman LLP (**Patent Law Clerk**).

⁷Won the Best Dissertation Award in the Physical Sciences and Engineering, Graduate School, University of Minnesota, 2005; and the ONR Young Investigator Award, 2007.

⁸Won the Best Dissertation Award in Telecommunication Technologies at the Univ. of Madrid, Spain, 2006.

29. E. Dall’Anese, “Spatio-temporal Spectrum Reuse based on Channel Gain Cartography,” Dec. 2010 (co-advised with Prof. S. Pupolin, Univ. of Padova, Italy); formerly with Ntl. Renewable Energy Lab (NREL), Denver, CO (**Research Engineer**); now with U. of Colorado, Boulder (**Assistant Professor**).
30. S. Farahmand, “Distributed and Robust Tracking by Exploiting Set-Membership and Sparsity,” June 2011; now with Iran Univ. of Science and Tech. (**Associate Professor**).
31. I. D. Schizas, “Exploiting Sparsity for Data Dimensionality-Reduction,” July 2011; now with the University of Texas at Arlington (**Associate Professor**).
32. E. Msechu, “Estimation with Wireless Sensor Networks: Censoring and Quantization Perspectives,” July 2011; now with Intel, CA (**Research Engineer**).
33. G. Mateos, “Sparsity Control for Robustness and Social Data Analysis,” Jan. 2012; now with the University of Rochester (**Assistant Professor**; received NSF-Career Award, 2018).
34. P. Forero, “Distributed and Robust Techniques for Statistical Learning,” April 2012; now with SPAWAR, San Diego (**Research Engineer**).
35. N. Gatsis, “Resource Management for Wireless Networks and the Smart Power Grid,” May 2012; now with the University of Texas at San Antonio (**Associate Professor**).
36. K. Rajawat, “Cross-Layer Designs with Network Coding,” May 2012; now with the Indian Inst of Tech. (IIT), Kanpur, India (**Associate Professor**).
37. H. Zhu, “Sparsity-Cognizant Algorithms for Monitoring the Smart Power Grid,” June 2012; formerly with U. of Illinois at Urbana-Champaign; now with the U. of Texas, Austin (**Assistant Professor**; received NSF-Career Award, 2017).
38. J.-A. Bazergue, “Sparse Structural Equation Modeling and Nonparametric Tensor Completion for Gene Expression Networks,” May 2013; formerly with UTE, Uruguay (**Research Engineer**); now with Univ. de la Republica, Uruguay (**Associate Professor**).
39. N. Yahya Soltani, “Dynamic Learning and Resource Management Under Uncertainties for Smart Grid and Cognitive Radio Networks,” May 2014; now with Eaton, WI (**Research Engineer**).
40. M. Mardani, “Sparsity and Low Rank for Big Data and Dynamic Networks,” April 2015; now post-doctoral researcher at Stanford U.
41. Y. Zhang, “Energy Management for Sustainable Power (Micro) Grids: Distributed, Robust and Risk-Limiting Designs,” May 2015; now with U. of California, Santa Cruz (**Assistant Professor**).
42. B. Baingana, “Dynamic Learning and Cartography for Time-Varying Social Networks,” January 2016; now with Wind Logic (**Research Engineer**).
43. G. Wang, “Non-Convex Phase Retrieval Algorithms and Performance Analysis,” March 2018; now postdoctoral researcher with the group.

➤ **Ph.D. Theses in progress**

44. T. Chen, “TBD” (Expected graduation date: Dec. 2018).
45. Y. Shen, “TBD” (Expected graduation date: Dec. 2018).
46. D. Berberidis, “TBD” (Expected graduation date: Jan. 2019).
47. F. Sheikholeslami, “TBD” (Expected graduation date: Jan. 2019).
48. P. Traganitis, “TBD” (Expected graduation date: May 2019).
49. L. Zhang, “TBD” (Expected graduation date: May 2019).
50. D. Lee, “TBD” (Expected graduation date: Dec. 2019).
51. G. V. Karanikolas, “TBD” (Expected graduation date: May 2020).
52. M. Ma, “TBD” (Expected graduation date: May 2020).
53. A. Sadeghi, “TBD” (Expected graduation date: Aug. 2020).
54. V. Ioannidis, “TBD” (Expected graduation date: Jan. 2021).
55. B. Li, “TBD” (Expected graduation date: Jan. 2022).
56. Z. Wang, “TBD”(Expected graduation date: Dec. 2022).

➤ **Completed M.Sc. Theses**

1. A. Dandawate, “Noise cancelers using higher-order statistics with application to speech enhancement,” October 1989.
2. M. Tsatsanis, “Detection, estimation and classification using matched filtering and higher-order statistics,” April 1990.⁹
3. M. Rangoussi, “Signal reconstruction algorithms and the use of inverse higher-order statistics,” May 1990; now with the Dept. of Electrical Engr., Ntl. Tech. Univ. of Athens, Greece (Research Assist. Prof.).
4. A. Delopoulos, “Estimation of autocorrelation and spectra using cumulants and polyspectra: non-parametric and parametric adaptive approaches,” May 1990; now with the Dept. of Electrical Engr., Aristotelian Univ. of Thessaloniki, Greece (Associate Professor).
5. C. Grobmyer, “Adaptive phase correction of one-sided asymmetric interferograms,” May 1992.
6. G. Zhou, “Amplitude modulated time series, higher-order statistics, and cyclostationarity,” December 1992.
7. C. Malek, “Topics in chaos and fractal signal processing,” May 1993.

⁹Received the Best Graduate Engineering Thesis Award (NEC Award), University of Virginia, 1990.

8. R. W. Heath Jr., “Mitigating channel distortions in wireless orthogonal frequency division multiplexing communication systems,” August 1997); now with the Univ. of Texas at Austin (Associate Professor).
9. Z. Wang, “Multirate Transceivers for Wireless Block Transmissions and Multicarrier CDMA Irrespective of Multipath Channels,” December 1998.
10. Y. Lin, “Globally Convergent Constant-Modulus Blind Equalization of Redundant Block Transmissions,” January 1999; now with Capital One, Richmond Virginia.
11. W. Tang, “Redundant Filterbank Precoders and Decision-Feedback Equalizers for Block Transmissions,” January 1999; now with Hughes Network Systems, MD.
12. A. Kambanellas, “All-Digital Modulo Pre-Equalization of Nonlinear Communication Channels,” February 1999; now with Telecom, Cyprus.
13. P. Anghel, “Generalized Multicarrier and Code Division Multiple Access in Wireless Multipath Channels,” March 1999.
14. Y. Liao, “Turbo-Decoding of Zero-Padded OFDM Transmissions,” April 2001.
15. L. Yang, “Multi-Stage Block-Spreading for Impulse Radio Multiple Access through ISI channels,” January 2002.
16. N. Bapat, “Turbo-Decoding of Unitary Precoded and Coded OFDM,” December 2002.
17. B. Lu, “Block Differential Encoding for Rapidly Fading Channels,” December 2002.
18. A. Ribeiro, “Distributed Quantization-Estimation for Wireless Sensor Networks,” August 2005.
19. T. Wang, “Wireless Cooperative Communications and Networking: Performance and Protocols,” January 2006.
20. S. Farahmand, “Low-Complexity Synchronization and Demodulation Algorithms for Ultra-Wideband Impulse Radios,” May 2006.
21. I. D. Schizas, “Distributed Estimation using Wireless Sensor Networks,” February 2007.
22. G. Mateos, “Distributed Adaptive Estimation and Tracking using Ad Hoc Wireless Sensor Networks,” July 2009.
23. J.-A. Bazerque, “Distributed Sensing and Resource Allocation for Cognitive Radio Networks,” August 2009. (Won the university-wide best M.Sc. Thesis Award for 2009.)
24. H. Zhu, “Distributed Kalman Filtering, Demodulation, and Decoding Using Consensus and Exploiting Sparsity,” September 2009.
25. N. Gatsis, “Utility-Based Power Control for Cooperative Dynamic Spectrum Access Networks,” July 2010.
26. N. Jain, “Joint Link Learning and Cognitive Radio Sensing,” May 2012.
27. B. Baingana, “Embedding Graphs under Centrality Constraints,” May 2013.

28. P. A. Traganitis, “Large-scale clustering using Random Sketching and Validation,” *Dept. of ECE, University of Minnesota*, July 2015.
29. D. K. Berberidis, “Online Censoring for Large-Scale Regressions with Application to Streaming Big Data,” *Dept. of ECE, University of Minnesota*, July 2015.
30. T. Chen, “Resource Allocation for Green Cloud Networks under Uncertainty: Stochastic, Robust and Big Data-driven Approaches,” *Dept. of ECE, University of Minnesota*, June 2016.
31. G. V. Karanikolas, “Multikernel-based Nonlinear Functional Connectivity Brain Models,” *Dept. of ECE, University of Minnesota*, August 2016.
32. V. N. Ioannidis, “Kernel-based Reconstruction and Kalman Filtering of Space-time Functions on Dynamic Graphs,” *Dept. of ECE, University of Minnesota*, July 2017.

➤ Undergraduate Theses supervised

1. A. Pressuti, “Analysis and synthesis of speech signals,” December 1990.
2. C. Malek, “A programming aid for chaotic and nonlinear system analysis,” May 1991.
3. D. Dinh, “A voice-activated appliance controller system design,” May 1991.
4. S. Pan, “Implementation and testing of human vocal tract estimation model,” May 1993.
5. E. Byrne “Hardware design of a DSP platform for high fidelity audio,” May 1993.
6. X. Wu “Use of a load plate under a dynamic test condition,” August 1993.
7. R. Mozeleski, “Digital processing of an audio signal for passive monitoring of hospital patients’ heart signal,” May 1994.
8. A. Redfern “Time-varying models of speech,” May 1995.
9. B. Allen, “Using wavelets for forecasting 1/f type behavior,” May 1995 (Applied Math student).
10. R. W. Heath Jr., “Blind blur identification and perfect image restoration,” May 1996. ¹⁰
11. A. Kambanellas, “Pre-equalization of OFDM systems,” April 1998.
12. A. Pitsillides, “Multicarrier Wide-band CDMA Systems,” May 1999.

➤ Postdoctoral Researchers supervised

1. Daniele Angelosante, 2009-2011; now with ABB, Switzerland (**Research Engineer**).
2. Xiaodong Cai, 2001-2004; now with the Univ. of Miami (**Professor**).
3. Alfonso Cano, 2007-2011; formerly with Broadcom, CA; now with Medtronic, MN (**Res. Engineer**).

¹⁰Received the William L. Everitt Student Award for Excellence; won the first prize in the Undergraduate Thesis Symposium (oral presentation), University of Virginia, 1996.

4. Jia Chen, 2017-present; now with the research group.
5. Emiliano Dall' Anese, 2011-2014; formerly with NREL: Ntl. Renewable Energy Lab, Denver, CO (**Research Engineer**); now with the Dept. of ECE, U. of Colorado, Boulder (**Assistant Professor**).
6. David Declercq; 1995-1997; now with the Univ. of Cergy, France (**Professor**).
7. Siavash Ghavami, 2015-2016; now with Mayo Clinic, Rochester, MN (**Research Fellow**).
8. Vasileios Kekatos, 2008-2014; now with Virginia Tech., (**Assistant Professor**).
9. Seung-Jun Kim, 2008-2013; now with the Univ. of Maryland Baltimore County (**Asst. Professor**).
10. Geert Leus, 2000-2002; now with Delft Univ. of Tech., Netherlands (**Professor and IEEE Fellow**).
11. Qin Lu, 2018-present; now with the group.
12. Bertrand Muquet, 1999-2001; now with Motorola, France (**Research Engineer**).
13. Athanasios Nikolakopoulos, 2017-present; still with the group.
14. Daniel Romero, 2015-2016; now with University of Agder, Norway, (**Associate Professor**).
15. Pooya Rezaei, 2015-2016; now with OATI (**Software Engineer**).
16. Anna Scaglione, 1999-2001; now with the Arizona State Univ.; formerly with Univ. of California, Davis; Cornell Univ.; and U. of New Mexico (**Professor and IEEE Fellow**).
17. Konstantinos Slavakis, 2012-2015, UMN (**Research Assoc. Prof.**); now with SUNY Buffalo (**Associate Professor**)
18. Gang Wang, 2018-present; still with the research group.
19. Xin Wang, 2005-2007; Florida Atlantic U., USA; and with Fudan U., P.R. China (**Professor**).
20. Yunlong Wang, 2015-2016; now with IMS Health Data Analytics (**Software Engineer**).
21. Yingwei Yao, 2002-2004; now with the Univ. of Illinois at Chicago (**Associate Professor**).

PAST, CURRENT, AND PENDING RESEARCH FUNDING

➤ **Summary figures: \$11,120,193 (as PI); \$4,861,537 (as co-PI); Total amount: \$15,981,730**

Past

- PA1. *Harry Diamond Labs* (\$35,000), “Optical Triple Correlators,” October 1988 - November 1989.
- PA2. *Univ. of Virginia: Dean’s Research Initiation Grant*, (\$9,000 no overhead), “Adaptive algorithms for neural networks,” October 1989-September 1990.
- PA3. *Harry Diamond Labs* (\$40,000), “Signal and image detection and classification using higher-order statistics,” October 1989 - July 1990.
- PA4. *Army Research Labs* (\$50,000), “Channel equalization and array processing using higher-order correlations,” November 1989 - October 1990.

- PA5. *Army Research Labs* (\$91,000), “Research in higher-order spectral analysis,” January 1991 - December 1991.
- PA6. *Dept. of Pediatrics, Health Sciences Center, Univ. of Virginia*, (\$15,000), “Signal processing architectures for neonatal heart rate variability tests,” January 1992-December 1992.
- PA7. *Army Research Labs* (\$45,000), “Canceling platform noise and detection of helicopter acoustic signals,” January 1992 - December 1993.
- PA8. *Office of Naval Research*, (\$20,000), “Intl. Workshop on Higher-Order Statistics,” (November 1992 - August 1993; ONR/Math. Div. N00014-93-1-0065.
- PA9. *Army Research Office*, (\$7,000), “Intl. Workshop on Higher-Order Statistics,” May 1993 - September 1993; DAAH04-93-G-0180.
- PA10. *National Science Foundation*, (\$90,000), “Optimal multiresolution analysis in statistical signal processing,” July 1992 - July 1995; NSF/MIPS - Research Initiation Award.
- PA11. *Office of Naval Research*, (\$179,000), “Polyspectral algorithms for optimal processing of cyclostationary acoustic signals,” July 1993 - October 1995; ONR Grant No. N00014-93-1-0485.
- PA12. *Army Research Office*, (\$10,000), “8th Intl. Workshop on Statistical Signal and Array Processing,” May 1, 1996 - April 30, 1997; ARO Grant No. DAAH04-96-1-0171.
- PA13. *Office of Naval Research*, (\$10,000), “8th Intl. Workshop on Statistical Signal and Array Processing,” May 1, 1996 - April 30, 1997; ONR Grant No. N00014-96-1-0725.
- PA14. *Harbor Branch, Oceanographic Inst., Inc.*, (\$20,000), “Propagation modeling, characterization, and equalization of underwater acoustic channels,” December 1, 1996 - November 30, 1997.
- PA15. *National Science Foundation (CISE/MIPS)*, (\$171,242), “Estimation and equalization of time-varying channels,” July 1995 - May 1999; NSF Grant No. MIP 9424305.
- PA16. *Office of Naval Research (AASERT)*, (\$191,614), “Applications of cyclostationarity in communications and signal analysis,” May 1, 1995 - September 30, 1998; ONR Grant No. N00014-95-1-0908.
- PA17. *Office of Naval Research*, (\$296,347), “Parametric modeling of nonstationary signals and identification of nonlinear time-varying channels,” October 1995 - October 1999 ONR Grant No. N00014-93-1-0485.
- PA18. *DURIP/ONR*, (\$145,429), “Instrumentation for Research in Wireless Communications,” 1997-1998; co-PI with Dr. H. Liu (PI).
- PA19. *Office of Naval Research*, (\$60,000), “PARAFAC Space-Time Processing for Circular Ring Arrays,” May 1999 - December 1999; ONR Grant No. N00014-99-1-0693; PI with co-PI N. Sidiropoulos.
- PA20. *Army Research Lab*, (\$25,000), “Multipath mitigation in frequency-hopping systems,” April 1999 - May 2001; DOD Grant no. ARL-7850-98.
- PA21. *Army Research Office*, (\$297,346), “Algorithm Development and Experimental Evaluation of Blind Equalizers for Rapidly Varying Channels with Antenna Arrays,” April 1998 - May 2001; ARO Grant no. DAAG55-98-1-0336.

- PA22. *National Science Foundation - CISE/CNRS (Communications and Networking)*, (\$255,000), “Design of User Codes and Low-Complexity CDMA Receivers for MUI Elimination in Unknown Multipath,” July 1, 1998 - June 30, 2001; NSF CCR grant no. 9805350.
- PA23. *General Dynamics, MN*, (\$25,000), “Frequency-Hopped Generalized Multi-Carrier Transceivers for Multi-User Communications,” October 1, 2001 - May 31, 2002.
- PA24. *National Science Foundation - Electrical and Communications Systems Div.* (\$925,000), “Mobile Communications and Networking: Low Power and Low Complexity Transceivers for Wireless Multimedia Transmissions,” September 1, 1999 - August 31, 2002; NSF Wireless Initiative grant no. 9979443; PI with 4 co-PIs: S. Alouini, M. Kaveh, J. Kieffer, and A. Tewfik.
- PA25. *ARL Collaborative Technology Alliance*, (\$250,000), “Precoding, Space-Time Coding, and Turbo-Decoding in FH Communications,” October 1, 2001 - September 2002; PI with N. Sidiropoulos co-PI.
- PA26. *ETRI, Korea*, (\$50,000), “Space-Time-Frequency Coding for MIMO OFDM,” May 1, 2002 - March 31, 2003.
- PA27. *ARL Collaborative Technology Alliance*, (\$350,000), “Precoding, Space-Time Coding, and Turbo-Decoding in FH Communications,” October 1, 2002 - September 2003; PI.
- PA28. *National Science Foundation - CISE/SPS (Signal Processing)*, (\$350,000), “Chip-interleaved Block-Spread Code Division Multiple Access,” May 1, 2001 - April 30, 2004; NSF SPS grant no. 0105612.
- PA29. *ARL Collaborative Technology Alliance*, (\$344,000), “Precoding, Space-Time Coding, and Turbo-Decoding in FH Communications,” October 1, 2003 - September 2004; PI.
- PA30. *ETRI, Korea*, (\$100,000), “Multicarrier MIMO Communications for High-Speed Mobile Cellular Access,” May 1, 2005 - December 31, 2006.
- PA31. *ARL Collaborative Technology Alliance*, (\$344,000), “Precoding, Space-Time Coding, and Turbo-Decoding in FH Communications,” October 1, 2004 - September 2005; PI.
- PA32. *ARL Collaborative Technology Alliance*, (\$325,000), “Precoding, Space-Time Coding, and Turbo-Decoding in FH Communications,” October 1, 2005 - September 2006; PI.
- PA33. *ARL Collaborative Technology Alliance*, (\$300,000), “Precoding, Space-Time Coding, and Turbo-Decoding in FH Communications,” October 1, 2006 - September 2007; PI.
- PA34. *ARL Collaborative Technology Alliance*, (\$280,000), “Precoding, Space-Time Coding, and Turbo-Decoding in FH Communications,” October 1, 2007 - September 2008; PI.
- PA35. *National Science Foundation - FMF Regular*, (\$450,906) “Waveform Diversity for Wireless Communications,” August 1, 2005 - July 30, 2008; co-PI with M. Zoltowski, Purdue Univ.; Giannakis’ part 71K/yr.
- PA36. *Army Research Office*, (\$272,000), “Energy-Efficient Protocols and Cross-Layer Designs for Wireless Sensor Networks,” June 1, 2005 - May 31, 2008 (sole PI).
- PA37. *National Science Foundation - Medium ITR Grant*, (\$1,599,980) “Multi-Robot Emergency Response,” September 1, 2003 - August 31, 2008; co-PI with 5 co-PIs; Giannakis’ part 70K/yr; multi-institutional proposal: UMN (lead), UPenn, and Caltech.

- PA38. *National Science Foundation - MRI*, (\$500,000) “Development of Miniature Search/Rescue Robots,” September 1, 2004 - August 31, 2008; co-PI with 5 co-PIs; Giannakis’ part 50K/yr; multi-institutional proposal: UMN (lead), Berea College.
- PA39. *ARL Collaborative Technology Alliance*, (\$275,000), “Precoding, Space-Time Coding, and Turbo-Decoding in FH Communications,” October 1, 2008 - September 30, 2010; PI.
- PA40. *National Science Foundation - ECCS Regular*, (\$300,000) “A Stochastic Framework for Robust Wireless Networking,” Sept. 1, 2008 - August 31, 2011 (sole PI).
- PA41. *National Science Foundation - CCF Regular*, (\$300,000) “Theoretical Foundations for Wireless Communication Networks,” Sept. 1, 2008 - Aug. 31, 2011 (sole PI).
- PA42. *National Science Foundation - CISE CCF*, (\$100,000) “CIF: Exploiting Sparsity for Dimensionality Reduction,” Sept. 1, 2010 - Aug. 31, 2011 (sole PI).
- PA43. *European Commission, CORDIS - Marie Curie Fellowship*, (\$81,871) “Distributed Estimation in Sensor Networks,” March 1, 2009 - Feb. 28, 2011 (co-PI with K. Berberidis, Greece).
- PA44. *Qatar National Research Fund*, (\$1,100,000) “Spectrum Cartography for Cognitive Radio Sensing,” Oct. 1, 2010 - Sept. 30, 2013 (PI with 3 co-PIs; Giannakis’ part 120K/yr; multi-institutional proposal: UMN (lead), Texas A&M, Qatar; and Qatar Univ.).
- PA45. *National Science Foundation - ECCS Regular*, (\$391,707) “IHCS: Sparsity-Aware RF Cartography for Cognitive Networks,” June 1, 2010 - May 31, 2013 (sole PI).
- PA46. *Australian Research Council*, (\$520,000) “Cross-layer design in wireless communication systems with channel uncertainty,” Oct. 1, 2010 - Sept. 30, 2013 (PI with 3 co-PIs; Giannakis’ part 60K/yr.).
- PA47. *National Science Foundation - CISE/CCF and ENG/ECCS*, (\$50,000) “Workshop on Control, Computing and Signal Processing for Future Power Systems,” November 1, 2013 - October 31, 2014 (co-PI with S. Dhople (Minnesota PI) and S. Low (Caltech)).
- PA48. *Institute of Renewable Energy and the Environment (IREE)*, (\$375,000) “Big Data and Control of Renewable Energy Sources in Microgrids,” December 1, 2012 - November 30, 2015 (PI with 2 additional co-PIs from Minnesota; no overhead; Giannakis’ part 65K/yr for 3 years.).
- PA49. *AirForce - MURI* (with U. of Pennsylvania; UofMn sub-award \$1,350,000 co-PI with S. Roumeliotis (PI)); “CHASE: Control of Heterogeneous Autonomous Sensors for Situational Awareness,” Sept. 1, 2010 - Aug. 31, 2015; Giannakis’ part 120K/yr.
- PA50. *National Science Foundation - ECCS*, (\$416,340) “Modeling, Monitoring, and Optimization of Cognitive Networks,” May 1, 2012 - April 30, 2015; no-cost extension to April 2016 (sole PI).
- PA51. *Greek Research Council - Thales Program*, (\$790,848) “Secure Wireless Nonlinear Communications at the Physical Layer,” Jan. 1, 2012 - Dec. 31, 2015; total of 12 co-PIs; Giannakis’ part 32K.
- PA52. *Greek Research Council - Thales Program*, (\$790,848) “Energy-efficient Designs of Communication Networks,” Jan. 1, 2012 - Dec. 31, 2015; total of 12 co-PIs; Giannakis’ part 24K.

- PA53. *National Science Foundation - EARS Program*, (\$499,379) “Spectral Tweets: A Community Paradigm for Spatio-temporal Cognitive Sensing and Access,” Sept. 1, 2012 - Aug. 31, 2015 (co-PI with J. Haupt, and N. Sidiropoulos (PI); Giannakis’ part 60K/yr for 3 years).
- PA54. *National Renewable Laboratory (NREL)*, (\$100,000) “Optimal Inverter Dispatch: Facilitating High PV Penetration with Optimization and Grid Informatics,” October 1, 2014 - September 30, 2016 (co-PI with S. Dhople (PI)); plus \$300K for B. Johnson (NREL).

Current

- CU1. *National Institutes of Health - Joint NIH-NSF-DMS Program on Computational Biology*, (\$1,840,214) “High-Dimensional Sparse Structural Equation Modeling for Inference of Gene Networks and Optimized Chemical Genomics,” September 1, 2012 - August 31, 2017 (co-PI with Chad Meyers (Minnesota), and two co-PIs from U. of Miami; PI: X. Cai; Minnesota part \$896,461; Giannakis’ part 95K/yr for 5 years.).
- CU2. *National Science Foundation - EARS Program*, (\$1,200,000) “Comprehensive Network State Inference for Policy-Cognizant Spectrum Access,” Sept. 1, 2013 - Aug. 31, 2017 (PI with S.-J. Kim, S. Kelley from Minnesota, and R. Baxley (GTRI); Giannakis’ part 775K/yr for 4 years).
- CU3. *National Science Foundation - CISE/CCF and ENG/ECCS*, (\$254,786) “From Communication to Power Networks: Adaptive Energy Management for Power Systems with Renewables,” September 1, 2014 - August 31, 2017 (PI); plus \$172,000 to U. Texas at San Antonio (N. Gatsis) (co-PI).
- CU4. *National Science Foundation - CCF/CyberSEES*, (\$649,147) “Tenable Power Distribution Networks,” September 1, 2014 - August 31, 2017 (PI with S. Dhople co-PI); plus \$550,000 to U. of Michigan (G. Mihailidis) and GWU (X. Chen).
- CU5. *National Science Foundation & AFOSR: EAGER-DynamicData Program*, (\$300,000) “Censor, Sketch, and Validate to Learn from Dynamic and Large-Sale Data,” Jan. 1, 2015 - Dec. 31, 2016 (sole PI).
- CU6. *Army Research Office*, (\$450,000) “Comprehensive Tactical Network State Inference from Incomplete Data,” June 1, 2015 - May 31, 2018.
- CU7. *National Science Foundation - ENG CCSS*, (\$410,230) “Smart-Grid Powered Green Communications in Heterogeneous Networks,” May 1, 2015 - April 30, 2018 (co-PI with X. Wang (PI), FAU); Giannakis part \$231,230 for 3 yrs.
- CU8. *National Science Foundation, ECCS-EPCN*, (\$300,000) “Stochastic Power Control and Learning for Energy Grids,” September 1, 2015 - August 31, 2018 (PI with V. Kekatos as co-PI).
- CU9. *National Science Foundation - CIF*, (\$100,000) “Parallel Online Learning for Big Data and Dynamic Networks,” September 1, 2015 - August 31, 2016 (PI).
- CU10. *National Science Foundation - ENGR CCSS*, (\$400,000) “Learn-and-Adapt to Manage Dynamic Cyber-Physical Networks,” May 1, 2017 - April 30, 2020 (PI).
- CU11. *Huawei Inc.*, (\$115,000) “High-Dimensional Parameter Self Optimization in Wireless Networks,” Oct. 1, 2018-Sept. 30, 2019 (PI).

PUBLICATIONS

➤ Theses

G. B. Giannakis, “Signal Processing via Higher-Order Statistics,” Ph.D. Thesis, University of Southern California, Los Angeles, California, July 1986.

G. B. Giannakis, “Spectral Estimation: Applications to Seismic Data Processing,” Diploma Thesis, National Technical Univ. of Athens, Athens, Greece, October 1981.

➤ Books

[B1] G. B. Giannakis, Y. Hua, P. Stoica, L. Tong, Editors, *Signal Processing Advances in Wireless and Mobile Communications*, Vol. 1: Trends in Channel Est. and Equalization, Prentice Hall, 2000.

[B2] G. B. Giannakis, Y. Hua, P. Stoica, L. Tong, Editors, *Signal Processing Advances in Wireless and Mobile Communications*, Vol. 2: Trends in Single- and Multi-User Systems, Prentice Hall, Inc., 2000.

[B3] G. B. Giannakis, Z. Liu, X. Ma, and S. Zhou, *Space-Time Coding for Broadband Wireless Communications*, John Wiley & Sons, Inc., 2007.

[B4] G. B. Giannakis and L. Yang *Ultra-Wideband Wireless Communications*, Cambridge University Press, to appear 2017.

[B5] G. B. Giannakis, G. Mateos and P. A. Forero, *Robust learning via sparsity in residuals: A universal approach to coping with outliers*, Foundations and Trends in Signal Processing, Y. Eldar, EiC, 2018.

[B6] K. Slavakis, S. J. Kim, G. Mateos, and G. B. Giannakis, *Modeling and Optimization for Big Data Analytics*, Foundations and Trends in Signal Processing, Y. Eldar, EiC, 2018.

➤ Book Chapters

[b1] V. Kekatos, G. Wang, H. Zhu, and G. B. Giannakis, “PSSE redux: Convex relaxation, decentralized, robust, and dynamic approaches,” Chapter 9 in *Advances in Electric Power and Energy; Power Systems Engineering*, M. El-Hawary Editor, 2018.

[b2] V. Ioannidis, M. Ma, A. N. Nikolakopoulos, and G. B. Giannakis, “Kernel-based Inference of Functions on Graphs,” Chapter in *Adaptive Learning Methods for Nonlinear System Modeling*, J. Principe and D. Comminiello Eds., Elsevier, 2018.

[b3] M. Mardani, G. Mateos, and G. B. Giannakis, “Big Data,” Chapter in *Cooperative and Graph Signal Processing*, P. Djuric and C. Richard Eds., 2018.

[b4] G. Mateos and G. B. Giannakis, “Robust PCA by controlling sparsity in model residuals,” in *Robust Decomposition in Low Rank and Sparse Matrices and its Applications in Image and Video Processing*, T. Bouwmans, E. Zahzah, and N. Aybat, Editors, CRC Press, 2017.

[b5] G. B. Giannakis, G. Mateos, I. D. Schizas, H. Zhu, and Q. Ling, “Decentralized learning for wireless communications and networking,” in *Splitting Methods in Communication and Imaging, Science and Engineering*, R. Glowinski, S. Osher, and W. Yin, Editors, New York, Springer, 2016.

- [b6] B. Baingana, P. Traganitis, G. Mateos and G. B. Giannakis, “Big Data analytics for Social Networks,” in *Graph Analysis for Social Media*, I. Pitas, Editor, CRC Press, 2015.
- [b7] A. G. Marques, N. Gatsis and G. B. Giannakis, “Optimal Cross-Layer Design of Wireless Multihop Networks,” in *Cross Layer Designs in WLAN Systems*, N. Zorba, C. Skianis, and C. Verikoukis, Editors, Troubador Publishing, Leicester, UK, 2010.
- [b8] A. Ribeiro, I. D. Schizas, J.-J. Xiao, G. B. Giannakis and Z.-Q. Luo, “Distributed Estimation under Bandwidth and Energy Constraints,” Chapter 7 in *Wireless Sensor Networks: Signal Processing and Communications Perspectives*, A. Swami, Q. Zhao, Y. Hong and L. Tong, Editors, pp. 149-184, Wiley, October 2007.
- [b9] I. D. Schizas, A. Ribeiro and G. B. Giannakis, “Dimensionality Reduction, Compression and Quantization for Distributed Estimation with Wireless Sensor Networks,” in *Wireless Communications*, P. Agrawal, D. M. Andrews, P. J. Fleming, G. Yin, and L. Zhang, eds., vol. 143 in Mathematics and its Applications, pp. 259–296, Springer, New York, 2006.
- [b10] L. Yang and G. B. Giannakis, “Digital-Carrier Spreading Codes for Baseband UWB Multiple Access,” in *Wireless Ultra-Wideband Radio Communications*, X. Shen, M. Guizani, R.-C. Qiu, and T. Le-Ngoc Editors, Wiley, 2006.
- [b11] Z. Tian and G. B. Giannakis, “Acquisition and Tracking for Ultra-Wideband Radios,” in *Wireless Ultra-Wideband Radio Communications*, X. Shen, M. Guizani, R.-C. Qiu, and T. Le-Ngoc Editors, Wiley 2006.
- [b12] X. Ma and G. B. Giannakis, “Communicating over Wireless Doubly-Selective Channels,” in *Space-Time Wireless Systems: From Array Processing to MIMO Communications*, H. Boelcskei, D. Gesbert, C. B. Papadias and A.-J. van der Veen Eds., Cambridge University Press, 2006.
- [b13] Z. Tian, T. Davidson, X. Luo, X. Wu and G. B. Giannakis, “Ultra-Wideband Pulse-Shaper Design,” in *UWB Wireless Communications*, H. Arslan and Y. Chen, Wiley 2005.
- [b14] S. Zhou and G. B. Giannakis, “MIMO Communications with Partial Channel State Information,” in *Space-Time Processing for MIMO Communications*, A. Gershman and N. Sidiropoulos Eds., Wiley 2005.
- [b15] F. Gini, G. B. Giannakis, M. Greco, L. Verrazzani and G. T. Zhou, “Texture Modeling, Estimation and Validation using Real Sea-Clutter Data,” *ASI Project*, E. Dalle Mese Ed., pp. 28-53, November 2002.
- [b16] C. Tepedelenlioglu and G. B. Giannakis. “Applications of Filterbanks to Communications,” in *Multi-rate Systems: Design and Applications*, Idea Group Publishing, 2001.
- [b17] Z. Wang and G. B. Giannakis. “Block spreading for multipath-resilient generalized multi-carrier CDMA”. In G. B. Giannakis, Y. Hua, P. Stoica, and L. Tong, editors, *Signal Processing Advances in Wireless and Mobile Communications*, volume 2, Chapter 6, Prentice-Hall Inc., 2000.
- [b18] A. Scaglione, G. B. Giannakis, and S. Barbarossa. “Linear Precoding for Estimation and Equalization of Frequency-Selective Channels”. In G. B. Giannakis, Y. Hua, P. Stoica, and L. Tong, editors, *Signal Processing Advances in Wireless and Mobile Communications*, volume 1, Chapter 9, Prentice-Hall Inc., 2000.

- [b19] G. B. Giannakis and G. T. Zhou, “Statistical Signal Processing: Higher-Order Tools,” chapter in Encyclopedia of Electrical and Electronics Engineering, vol. 20, pp. 492-509, John Wiley & Sons Inc., 1999.
- [b20] A. Swami, G. B. Giannakis, and G. Zhou, “Bibliography on Higher-Order Statistics,” Signal Processing, vol. 60, pp. 65-126, Elsevier Science Publ. B.V., 1997.
- [b21] G. B. Giannakis, “Statistical Signal Processing,” chapter in Digital Signal Processing Handbook, V. K. Madiseti, D. Williams, Editors-in-Chief, CRC Press, 1998.
- [b22] S. Shamsunder and G. B. Giannakis, “Cyclic and High-Order Sensor Array Processing,” in Digital Signal Processing Techniques and Applications, Editor, C. T. Leondes, vol. 75, pp. 259-299, Academic Press, 1996.
- [b23] G. B. Giannakis, and G. Zhou, “On amplitude modulated time series, higher-order statistics and cyclostationarity,” in Higher-Order Statistical Signal Processing and Applications, Eds. E. Powers, B. Boashash, and A. Zoubir, pp. 179-209, Longman Chesire, Australia, 1995 (ISBN 0 582 800773).
- [b24] G. B. Giannakis, “Trends in Spectral Analysis: Higher-Order and Cyclic Statistics,” in Digital Signal Proc. Tech., P. Papamichalis and R. Kerwin, Eds., pp. 74-97, vol. CR57, 1995.

➤ Patents issued

- [P1] G. B. Giannakis, and H. Zhu, “State Estimation of Electrical Power Networks using Semidefinite Relaxation,” **US Patent no. 9,863,985 B2**, issued January 9, 2018.
- [P2] G. B. Giannakis, and X. Ma, “Estimating Frequency-offsets and Multi-antenna Channels in MIMO-OFDM Systems,” **US Patent no. 9,614,633**, issued April 4, 2017.
- [P3] S. Dhople, G. B. Giannakis, and E. Dall’Anese, “Decentralized Optimal Dispatch of Photovoltaic Inverters in Power Distribution Systems,” **US-2016-0259314-A1**, published Sept. 8, 2016.
- [P4] G. B. Giannakis, E. Dall’Anese, J. A. Bazerque, H. Zhu, and G. Mateos, “Robust Parametric Power Spectrum Density Map Construction,” **US Patent no. 9,363,679**, issued June 7, 2016.
- [P5] G. B. Giannakis, and X. Ma, “Estimating Frequency-offsets and Multi-antenna Channels in MIMO-OFDM Systems,” **US Patent no. 9,374,143 B2**, issued June 1, 2016.
- [P6] G. B. Giannakis, G. Mateos, and J. A. Bazerque, “Non-parametric Power Spectral Density Map Construction,” **US Patent no. 9,191,831**, issued November 17, 2015.
- [P7] G. B. Giannakis, and X. Ma, “Estimating Frequency-offsets and Multi-antenna Channels in MIMO-OFDM Systems,” **US Patent no. 2015/0288430 A1**, issued October 8, 2015.
- [P8] G. B. Giannakis, and X. Ma, “Estimating Frequency-offsets and Multi-antenna Channels in MIMO-OFDM Systems,” **US Patent no. 8,718,185 B2**, issued May 6, 2014.
- [P9] G. B. Giannakis, J. A. Bazerque, and G. Mateos, “Nonparametric Power Spectral Density (PSD) Map Construction,” **US Patent no. 2013/0310093/A1**, issued November 21, 2013.
- [P10] G. B. Giannakis, and X. Ma, “Estimating Frequency-offsets and Multi-antenna Channels in MIMO-OFDM Systems,” **US Patent no. 8,588,317**, issued November 19, 2013.

- [P11] G. B. Giannakis, and X. Ma, “Estimating Frequency-offsets and Multi-antenna Channels in MIMO-OFDM Systems,” **US Patent no. 8,064,528 B2**, issued November 22, 2011.
- [P12] G. B. Giannakis, and X. Ma, “Estimating Frequency-offsets and Multi-antenna Channels in MIMO-OFDM Systems,” **US Patent no. 20110255572 A1**, issued October 20, 2011.
- [P13] G. B. Giannakis and X. Luo, “Blind Synchronization and Demodulation,” **US Patent no. 7,864,880 B2**, issued January 4, 2011.
- [P14] G. B. Giannakis and L. Yang, “Noncoherent Ultra-Wideband (UWB) Demodulation,” **US Patent no. 7,769,115**, issued August 3, 2010.
- [P15] G. B. Giannakis, L. Yang, and X. Luo, “Pulse shaper design for ultra-wideband communications,” **US Patent no. 7,738,545**, issued June 15, 2010.
- [P16] G. B. Giannakis, and X. Ma, “Full-Diversity Full-Rate Complex-Field Space-Time Coding for Wireless Communications,” **US Patent no. 7,706,454**, issued April 27, 2010.
- [P17] G. B. Giannakis, P. Xia and S. Zhou, “Bandwidth- and Power-Efficient Multi-Carrier Multiple Access for Uplink Broadband Wireless Communications,” **US 7,672,384 B2**, issued March 2, 2010.
- [P18] G. B. Giannakis, and S. Zhou, “Space-Time Coded Transmissions within a Wireless Communication Network,” **US Patent no. 7,609,782**, issued October 27, 2009.
- [P19] G. B. Giannakis, and X. Ma, “Channel Estimation for Block Transmissions over Time- and Frequency-Selective Wireless Fading Channels,” **US Patent no. 7,590,188**, issued September 15, 2009.
- [P20] G. B. Giannakis and L. Yang, “Digital-Carrier Multi-Band User Codes for Baseband UWB Multiple Access,” **US Patent No. 7,561,613**, issued July 14, 2009.
- [P21] G. B. Giannakis, and S. Zhou, “Space-Time Coding using Estimated Channel Information,” **US Patent no. 7,522,673**, issued April 21, 2009.
- [P22] G. B. Giannakis and L. Yang, “Multi-User Interference Resilient Ultrawideband Communication,” **US Patent no. 7,496,128**, issued February 24, 2009.
- [P23] G. B. Giannakis, and S. Zhou, “Space-Time Coded Transmissions within a Wireless Communication Network,” **Korean Patent no. 10-0870557**, issued November 27, 2008.
- [P24] G. B. Giannakis, and S. Zhou, “Receiver for chip-interleaved block-spread multi-user communication systems,” **US Patent no. 7,403,509**, issued July 22, 2008.
- [P25] G. B. Giannakis, and L. Yang, “Timing Synchronization Using Dirty Templates in Ultra-Wideband (UWB) Communications,” **US Patent no. 7,342,972**, issued March 11, 2008.
- [P26] G. B. Giannakis and L. Yang, “Analog Space-Time Coding for Multi-Antenna Ultra-Wideband Transmissions,” **US Patent no. 7,340,009**, issued March 4, 2008.
- [P27] G. B. Giannakis, Y. Xin, and Z. Wang, “Linear Constellation Precoding For Fading Communication Channels,” **US Patent. No. 7,292,647**, issued November 6, 2007.

- [P28] G. B. Giannakis, and X. Ma, “Space-time-doppler Coding For Wireless And Mobile Communications over Time-selective And Doubly-selective Fading Channels,” **US Patent no. 7,280,604**, issued October 9, 2007.
- [P29] G. B. Giannakis, S. Zhou, and Z. Wang, “Wireless communication system having error-control coder and linear precoder, **US Patent. No. 7,251,768**, issued July 31, 2007.
- [P30] G. B. Giannakis, and X. Ma, “Space-time-multipath Coding Using Digital Phase Sweeping And Block Circular Delay Diversity For Wireless Transmissions Over Frequency-selective Fading Channels,” **US Patent no. 7,224,744**, issued May 29, 2007.
- [P31] G. B. Giannakis, and S. Zhou, “Space-Time Coded Transmissions With Maximum Diversity Gains Over Frequency-selective Multipath Fading Channels,” **US 7,190,734**, issued March 13, 2007.
- [P32] G. B. Giannakis, and S. Zhou, “Channel estimation for wireless OFDM systems,” **US Patent. No. 7,139,321**, issued Nov. 21, 2006.
- [P33] G. B. Giannakis, and S. Zhou, “Chip-Interleaved Block-spread Code Division Multiple Access (CIBS-CDMA),” **US Patent no. 6,912,241**, issued June 28, 2005.

Refereed journal publications: 430 (appeared) + 20 (in review); Number of Citations: **68,100**

Refereed conference publications: 730; available at URL <http://spincom.umn.edu/>; **h-index=134**.

COLLABORATORS

> US

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➤ International

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2018 **Refereed Journal Papers**

- [J1] P. You, S. H. Low, L. Zhang, R. Deng, G. B. Giannakis, Y. Sun, and Z. Yang, “Scheduling of EV Battery Swapping, Part II: Distributed Solutions,” *IEEE Transactions on Smart Grid*, to appear 2018.
- [J2] B. Li, T. Chen, X. Wang, and G. B. Giannakis, “Real-time Optimal Energy Management with Reduced Battery Capacity Requirements,” *IEEE Transactions on Smart Grid*, to appear 2018.
- [J3] T. Chen, Q. Ling, and G. B. Giannakis, “Learn-and-Adapt Stochastic Dual Gradients for Network Resource Allocation,” *IEEE Transactions on Control of Network Systems*, to appear December 2018.
- [J4] X. Lyu, W. Ni, H. Tian, R.-P. Liu, X. Wang, G. B. Giannakis, and A. Paulraj, “Distributed Online Optimization of Fog Computing for Selfish Devices with Out-of-Date Information,” *IEEE Transactions on Wireless Communications*, vol. 17, no. 12, to appear December 2018.
- [J5] T. Chen, Q. Ling, Y. Shen, and G. B. Giannakis, “Heterogeneous Online Learning for “Thing-Adaptive” Low-Latency Fog Computing in IoT,” *IEEE Internet of Things Journal*, to appear December 2018.
- [J6] T. Chen and G. B. Giannakis, “Bandit Convex Optimization for Scalable and Dynamic IoT Management,” *IEEE Internet of Things Journal*, to appear November 2018.
- [J7] F. Sheikholeslami and G. B. Giannakis, “Identification of Overlapping Communities via Constrained Egonet Tensor Decomposition,” *IEEE Transactions on Signal Processing*, vol. 66, to appear November 2018.
- [J8] L. Zhang, G. Wang, G. B. Giannakis, and J. Chen, “Compressive Phase Retrieval via Reweighted Amplitude Flow,” *IEEE Transactions on Signal Processing*, vol. 66, no. 19, pp. 5029-5040, October 2018.
- [J9] D. K. Berberidis and G. B. Giannakis, “Data-adaptive Active Sampling for Efficient Graph-Cognizant Classification,” *IEEE Transactions on Signal Processing*, vol. 66, no. 19, pp. 5167-5179, October 2018.
- [J10] P. A. Traganitis, A. Pages-Zamore, and G. B. Giannakis, “Blind Multi-Class Ensemble Learning with Unequally Reliable Classifiers,” *IEEE Transactions on Signal Processing*, vol. 66, no. 18, pp. 4737-4752, September 2018.
- [J11] L. M. Lopez-Ramos, V. Kekatos, A. G. Marques, and G. B. Giannakis, “Two-Timescale Stochastic Dispatch of Power Distribution Networks,” *IEEE Transactions on Smart Grid*, vol. 5, pp. 4282-4292, September 2018
- [J12] J. Chen, G. Wang, Y. Shen, and G. B. Giannakis, “Canonical Correlation Analysis of Datasets with a Common Source Graph,” *IEEE Transactions on Signal Processing*, vol. 66, no. 16, pp. 4398-4408, August 2018.
- [J13] V. N. Ioannidis, D. Romero, and G. B. Giannakis, “Inference of Spatio-Temporal Functions over Graphs via Multi-Kernel Kriged Kalman Filtering,” *IEEE Transactions on Signal Processing*, vol. 66, no. 12, pp. 3228-3239, June 2018.

- [J14] G. Wang, G. B. Giannakis, Y. Saad, and J. Chen, "Phase Retrieval via Reweighted Amplitude Flow," *IEEE Transactions on Signal Processing*, vol. 66, no. 11, pp. 2818-2833, June 2018.
- [J15] G. B. Giannakis, Y. Shen, and G. V. Karanikolas, "Topology Identification and Learning over Graphs: Accounting for Nonlinearities and Dynamics," *Proceedings of the IEEE*, vol. 106, no. 5, pp. 787-807, May 2018.
- [J16] X. Wang, X. Chen, T. Chen, L. Huang, and G. B. Giannakis, "Two-Scale Stochastic Control for Multipoint Communication Systems with Renewables," *IEEE Transactions on Smart Grid*, vol. 9, no. 3, pp. 1822-1834, May 2018.
- [J17] D. Romero, D. Lee, and G. B. Giannakis, "Blind Radio Tomography," *IEEE Transactions on Signal Processing*, vol. 66, no. 08, pp. 2055-2069, April 2018.
- [J18] P. A. Traganitis and G. B. Giannakis, "Sketched Subspace Clustering," *IEEE Transactions on Signal Processing*, vol. 66, no. 7, pp. 1663-1675, April 2018.
- [J19] F. Sheikholeslami, D. K. Berberidis, and G. B. Giannakis, "Large-scale Kernel-based Feature Extraction via Budgeted Nonlinear Subspace Tracking," *IEEE Transactions on Signal Processing*, vol. 66, no. 8, pp. 1967-1981, April 2018.
- [J20] G. Wang, A. S. Zamzam, G. B. Giannakis, and N. D. Sidiropoulos, "Power System State Estimation via Feasible Point Pursuit: Algorithms and Cramer-Rao Bound," *IEEE Transactions on Signal Processing*, vol. 66, no. 6, pp. 1649-1658, March 2018.
- [J21] Z. Wang, Z. Yu, Q. Ling, D. K. Berberidis, and G. B. Giannakis, "Decentralized RLS with Data-Adaptive Censoring for Regressions over Large-Scale Networks," *IEEE Transactions on Signal Processing*, vol. 66, no. 6, pp. 1634-1648, March 2018.
- [J22] A. Sadeghi, F. Sheikholeslami, and G. B. Giannakis, "Optimal and Scalable Caching for 5G Using Reinforcement Learning of Space-time Popularities," *IEEE Journal of Selected Topics in Signal Processing*, vol. 12, no. 1, pp. 180-190, February 2018.
- [J23] G. Wang, G. B. Giannakis, and Y. Eldar, "Solving Random Systems of Quadratic Equations via Truncated Amplitude Flow," *IEEE Transactions on Information Theory*, vol. 64, no. 2, pp. 773-794, February 2018.
- [J24] G. Wang, L. Zhang, G. B. Giannakis, M. Akcakaya, and J. Chen, "SPARTA: Sparse Phase Retrieval via Truncated Amplitude Flow," *IEEE Transactions on Signal Processing*, vol. 66, no. 2, pp. 479-491, January 2018.
- 2017**
- [J25] T. Chen, Q. Ling, and G. B. Giannakis, "An Online Convex Optimization Approach to Dynamic Network Resource Allocation," *IEEE Transactions on Signal Processing*, vol. 65, no. 24, pp. 6350-6364, December 2017.
- [J26] L. Zhang, G. Wang, D. Romero, and G. B. Giannakis, "Randomized Block Frank-Wolfe for Convergent Large-Scale Learning," *IEEE Transactions on Signal Processing*, vol. 65, no. 24, pp. 6448-6461, December 2017.

- [J27] X. Lyu, W. Ni, H. Tian, R.-P. Liu, X. Wang, G. B. Giannakis, and A. Paulraj, "Optimal Schedule of Mobile Edge Computing for Internet of Things using Partial Information," *IEEE Journal on Selected Areas in Communications*, vol. 35, no. 11, November 2017.
- [J28] D. Lee, S.-J. Kim, and G. B. Giannakis, "Channel Gain Cartography for Cognitive Radios Leveraging Low Rank and Sparsity," *IEEE Transactions on Wireless Communications*, vol. 16, no. 9, pp. 5953 - 5966, November 2017.
- [J29] S.-J. Kim and G. B. Giannakis, "An Online Convex Optimization Approach to Real-Time Energy Pricing for Demand Response," *IEEE Transactions on Smart Grid*, vol. 8, no. 6, pp. 2784 - 2793, November 2017.
- [J30] D. Romero, V. N. Ioannidis, and G. B. Giannakis, "Kernel-based Reconstruction and Kalman Filtering of Space-time Functions on Dynamic Graphs," *IEEE Journal on Special Topics in Signal Processing*, vol. 11, no. 06, pp. 856 - 869, September 2017.
- [J31] Y. Shen, M. Mardani, and G. B. Giannakis, "Online Categorical Subspace Learning for Sketching Big Data with Misses," *IEEE Transactions on Signal Processing*, vol. 65, no. 15, pp. 4004-4018, August 2017.
- [J32] X. Chen, W. Ni, T. Chen, I. B. Collins, X. Wang, and G. B. Giannakis, "Real-time Energy Trading and Future Planning for Fifth-Generation Wireless Communications," *IEEE Wireless Communications Magazine*, to appear July 2017.
- [J33] Y. Shen, B. Baingana, and G. B. Giannakis, "Tensor Decompositions for Identifying Directed Graph Topologies and Tracking Dynamic Networks," *IEEE Transactions on Signal Processing*, vol. 65, no. 14, pp. 3675 - 3687, July 2017.
- [J34] D. K. Berberidis and G. B. Giannakis, "Data Sketching for Large-Scale Kalman Filtering," *IEEE Transactions on Signal Processing*, vol. 65, no. 14, pp. 3688 - 3701, July 2017.
- [J35] T. Chen, A. G. Marques, and G. B. Giannakis, "DGLB: Distributed Stochastic Geographical Load Balancing with Incentive Payment," *IEEE Transactions on Parallel and Distributed Systems*, vol. 28, no. 7, pp. 1866-1880, July 2017.
- [J36] T. Chen, A. Mokhtari, X. Wang, A. Ribeiro, and G. B. Giannakis, "Stochastic Averaging for Constrained Optimization with Application to Online Resource Allocation," *IEEE Transactions on Signal Processing*, vol. 65, no. 12, pp. 3078-3093, June 2017.
- [J37] Y. Shen, B. Baingana, and G. B. Giannakis, "Kernel-based Structural Equation Models for Topology Identification of Directed Networks," *IEEE Transactions on Signal Processing*, vol. 65, no. 10, pp. 2503-2516, May 2017.
- [J38] D. Romero, S.-J. Kim, G. B. Giannakis, and R. Lopez-Valcarce, "Learning Power Spectrum Maps from Quantized Measurements," *IEEE Transactions on Signal Processing*, vol. 65, no. 10, pp. 2547-2560, May 2017.
- [J39] G. Wang, G. B. Giannakis, and J. Chen, "Scalable Solvers of Random Quadratic Equations via Stochastic Truncated Amplitude Flow," *IEEE Transactions on Signal Processing*, vol. 65, no. 8, pp. 1961-1974, April 2017.

2016

- [J40] L. Zhang, V. Kekatos, and G. B. Giannakis, “Scalable Electric Vehicle Charging Protocols,” *IEEE Transactions on Power Systems*, vol. 32, no. 2, pp. 1451-1462, March 2017.
- [J41] B. Baingana and G. B. Giannakis, “Tracking Switched Dynamic Network Topologies from Information Cascades,” *IEEE Transactions on Signal Processing*, vol. 65, no. 4, pp. 985-997, February 2017.
- [J42] D. Romero, M. Ma, and G. B. Giannakis, “Kernel-based Reconstruction of Graph Signals,” *IEEE Transactions on Signal Processing*, vol. 65, no. 3, pp. 764-778, February 2017.
- [J43] X. Wang, T. Chen, X. Chen, X. Zhou, and G. B. Giannakis, “Dynamic Resource Allocation for Smart-Grid Powered MIMO Downlink Transmissions,” *IEEE Journal on Selected Areas in Communications*, vol. 34, no. 12, pp. 3354 - 3365, December 2016.
- [J44] S.-J. Kim and G. B. Giannakis, “An Online Convex Optimization Approach to Real-Time Energy Pricing for Demand Response,” *IEEE Transactions on Smart Grid*, to appear 2016.
- [J45] G. Wang, V. Kekatos, A.-J. Coneho, and G. B. Giannakis, “Ergodic Energy Management Leveraging Resource Variability in Distribution Grids,” *IEEE Transactions on Power Systems*, vol. 31, no. 6, pp. 4765-4775, November 2016.
- [J46] V. Kekatos, L. Zhang, G. B. Giannakis, and R. Baldick, “Voltage Regulation Algorithms for Multi-phase Power Distribution Grids,” *IEEE Transactions on Power Systems*, vol. 31, no. 5, pp. 3913-3923, September 2016.
- [J47] S. Hu, Y. Zhang, X. Wang, and G. B. Giannakis, “Weighted Sum-Rate Maximization for MIMO Downlink Systems Powered by Renewables,” *IEEE Transactions on Wireless Communications*, vol. 15, no. 8, pp. 5615 - 5625, August 2016.
- [J48] D. K. Berberidis, V. Kekatos, and G. B. Giannakis, “Online Censoring for Large-Scale Regressions with Application to Streaming Big Data,” *IEEE Transactions on Signal Processing*, vol. 64, no. 15, pp. 3854-3867, August 2016.
- [J49] S. S. Guggilam, E. Dall’Anese, Y. Chen, S. Dhople, and G. B. Giannakis, “Scalable Optimization Methods for Distribution Networks with High PV Integration,” *IEEE Transactions on Smart Grid*, vol. 7, no. 4, pp. 2061-2070, July 2016.
- [J50] E. Dall’Anese, S. Dhople, and G. B. Giannakis, “Photovoltaic Inverter Controllers Seeking AC Optimal Power Flow Solutions,” *IEEE Transactions on Power Systems*, vol. 31, no. 4, pp. 2809-2823, July 2016.
- [J51] M. Mardani and G. B. Giannakis, “Estimating Traffic and Anomaly Maps via Network Tomography,” *IEEE/ACM Transactions on Networking*, vol. 24, no. 3, pp. 1533-1547, June 2016.
- [J52] X. Wang, Y. Zhang, T. Chen, and G. B. Giannakis, “Dynamic Energy Management for Smart-Grid Powered Coordinated Multipoint Systems,” *Journal on Selected Areas in Communications*, vol. 34, no. 5, pp. 1348-1359, May 2016.
- [J53] V. Kekatos, G. B. Giannakis, and R. Baldick, “Online Energy-Price Matrix Factorization for Power Grid Topology Tracking,” *IEEE Transactions on Smart Grid*, vol. 7, no. 3, pp. 1239-1248, May 2016.

- [J54] B. Baingana and G. B. Giannakis, “Joint Community and Anomaly Tracking in Dynamic Networks,” *IEEE Transactions on Signal Processing*, vol. 68, no. 8, pp. 2013-2025, April 2016.
- [J55] T. Chen, Y. Zhang, X. Wang, and G. B. Giannakis, “Robust Workload and Energy Management for Green Data Centers,” *IEEE Journal on Selected Areas in Communications*, vol. 34, no. 3, pp. 651-654, March 2016.
- [J56] T. Chen, X. Wang, and G. B. Giannakis, “Cooling-Aware Energy and Workload Management in Data Centers via Stochastic Optimization,” *IEEE Journal on Special Topics in Signal Processing*, vol. 10, no. 2, pp. 402-405, March 2016.
- [J57] Y. Zhang and G. B. Giannakis, “Distributed Stochastic Market Clearing with High-Penetration Wind Power and Large-Scale Demand Response,” *IEEE Transactions on Power Systems*, vol. 31, no. 2, pp. 895-906, March 2016.
- [J58] S. Jain, S.-J. Kim, and G. B. Giannakis, “Backhaul-Constrained Multicell Cooperation Leveraging Sparsity and Spectral Clustering,” *IEEE Transactions on Wireless Communications*, vol. 15, no. 2, pp. 899-912, February 2016.
- 2015**
- [J59] V. Kekatos, G. Wang, A.-J. Coneho, and G. B. Giannakis, “Stochastic Reactive Power Management in Microgrids with Renewables,” *IEEE Transactions on Power Systems*, vol. 30, no. 6, pp. 3386-3395, November 2015.
- [J60] X. Wang, Y. Zhang, G. B. Giannakis, and S. Hu, “Robust Smart-Grid Powered Cooperative Multi-point Systems,” *IEEE Transactions on Wireless Communications*, vol. 14, no. 11, pp. 6188-6199, November 2015.
- [J61] G. B. Giannakis, R. Cendrillon, V. Cevher, A. Swami, and Z. Tian, “Introduction to the Issue on Signal Processing for Big Data,” *IEEE Journal on Special Topics in Signal Processing*, vol. 9, no. 4, pp. 583-585, June 2015.
- [J62] P. A. Traganitis, K. Slavakis, and G. B. Giannakis, “Big Data Clustering via Sketching and Validation,” *IEEE Journal on Special Topics in Signal Processing*, vol. 9, no. 4, pp. 678-690, June 2015.
- [J63] M. Mardani, G. Mateos, and G. B. Giannakis, “Subspace Learning and Imputation for Streaming Big Data Matrices and Tensors,” *IEEE Transactions on Signal Processing*, vol. 63, no. 10, pp. 2663 - 2677, May 2015.
- * Co-author M. Mardani received IEEE SPS Young Author Best Paper Award in 2018**
- [J64] N. Y. Soltani, S.-J. Kim, and G. B. Giannakis, “Real-Time Load Elasticity Tracking and Pricing for Electric Vehicle Charging,” *IEEE Transactions on Smart Grid*, vol. 6, no. 3, pp. 1303 - 1313, May 2015.
- [J65] E. Dall’Anese, S. Dhople, B. B. Johnson, and G. B. Giannakis, “Optimal Dispatch of Residential Photovoltaic Inverters Under Forecasting Uncertainties,” *IEEE Journal of Photovoltaics*, vol. 5, no. 1, pp. 350-359, January 2015.
- 2014**
- [J66] V. Kekatos, Y. Zhang, and G. B. Giannakis, “Electricity Market Forecasting via Low-Rank Multi-Kernel Learning,” *IEEE Journal of Selected Topics in Signal Processing*, vol. 8, no. 6, pp. 1182-1193, December 2014.

- [J67] H. Zhu and G. B. Giannakis, "Power System Nonlinear State Estimation using Distributed Semidefinite Programming," *IEEE Journal of Selected Topics in Signal Processing*, vol. 8, no. 6, pp. 1039-1050, December 2014.
- [J68] E. Dall'Anese, S. Dhople, B. B. Johnson, and G. B. Giannakis, "Decentralized Optimal Dispatch of Residential Photovoltaic Inverters," *IEEE Transactions on Energy Conversion*, vol. 29, no. 4, pp. 957-967, December 2014.
- [J69] K. Slavakis, S.-J. Kim, G. Mateos, and G. B. Giannakis, "Stochastic Approximation vis-a-vis Online Learning for Big Data Analytics," *IEEE Signal Processing Magazine*, vol. 31, pp. 124-129, November 2014.
- [J70] E. Dall'Anese and G. B. Giannakis, "Risk-Constrained Microgrid Reconfiguration using Group Sparsity," *IEEE Transactions on Sustainable Energy*, vol. 5, no. 4, pp. 1415-1425, October 2014.
- [J71] G. B. Giannakis, F. Bach, R. Cendrillon, M. Mahoney, and J. Neville, "Signal Processing for Big Data," *IEEE Signal Processing Magazine*, vol. 31, pp. 15-16, (Editorial for Special Issue), September 2014.
- [J72] K. Slavakis, G. B. Giannakis, and G. Mateos, "Modeling and Optimization for Big Data Analytics," *IEEE Signal Processing Magazine*, vol. 31, pp. 18-31, September 2014.
- [J73] B. Baingana, G. Mateos, and G. B. Giannakis, "Dynamic Structural Equation Models for Social Network Topology Inference," *IEEE Journal on Selected Topics in Signal Processing*, vol. 8, no. 4, pp. 563-575, August 2014.
- [J74] P. Forero, K. Rajawat, and G. B. Giannakis, "Prediction of Partially Observed Dynamical Processes over Networks via Dictionary Learning," *IEEE Transactions on Signal Processing*, vol. 62, no. 13, pp. 3305-3320, July 2014.
- [J75] E. Dall'Anese and G. B. Giannakis, "Sparsity-leveraging Reconfiguration of Smart Distribution Systems," *IEEE Transactions on Power Delivery*, vol. 29, no. 3, pp. 1417-1426, June 2014.
- [J76] K. Rajawat, E. Dall'Anese, and G. B. Giannakis, "Dynamic Network Delay Cartography," *IEEE Transactions on Information Theory*, vol. 60, no. 05, pp. 2910-2920, May 2014.
- [J77] E. Dall'Anese, S. Dhople, and G. B. Giannakis, "Optimal Dispatch of Photovoltaic Inverters in Residential Distribution Systems," *IEEE Transactions on Sustainable Energy*, vol. 5, no. 2, pp. 487-497, April 2014.
- [J78] A. G. Marques, E. Dall'Anese, and G. B. Giannakis, "Cross-Layer Optimization and Receiver Localization for Cognitive Networks Using Interference Tweets," *IEEE Journal of Selected Topics in Communications*, vol. 32, no. 3, pp. 641-653, March 2014.
- [J79] S. Farahmand, G. B. Giannakis, G. Leus, and Z. Tian, "Tracking Target Signal Strengths on a Grid using Sparsity," *EURASIP Journal on Advances in Signal Processing*, doi:10.1186/1687-6180-2014-7, January 2014.
- [J80] G. Mateos and G. B. Giannakis, "Load Curve Data Cleansing and Imputation via Sparsity and Low Rank," *IEEE Transactions on Smart Grid*, vol. 4, no. 4, pp. 2347-2355, December 2013.

- [J81] S.-J. Kim and G. B. Giannakis, “Scalable and Robust Demand Response with Mixed-Integer Constraints,” *IEEE Transactions on Smart Grid*, vol. 4, no. 4, pp. 2089-2099, December 2013.
- [J82] N. Gatsis and G. B. Giannakis, “Decomposition Algorithms for Market Clearing with Large-Scale Demand Response,” *IEEE Transactions on Smart Grid*, vol. 4, no. 4, pp. 1976-1987, December 2013.
- [J83] D. Angelosante, G. B. Giannakis, and N. D. Sidiropoulos, “Sparse Parametric Models for Robust Nonstationary Signal Analysis,” *IEEE Signal Processing Magazine*, vol. 30, no. 6, pp. 64-73, November 2013.
- [J84] J. A. Bazerque, G. Mateos, and G. B. Giannakis, “Rank Regularization in Bayesian Inference for Tensor Completion and Extrapolation,” *IEEE Transactions on Signal Processing*, vol. 61, no. 22, pp. 5689-5703, November 2013.
- [J85] M. Mardani, G. Mateos, and G. B. Giannakis, “Decentralized Sparsity-regularized Rank Minimization: Algorithms and Applications,” *IEEE Transactions on Signal Processing*, vol. 61, no. 11, pp. 5374-5388, November 2013.
- [J86] Y. Zhang, N. Gatsis, and G. B. Giannakis, “Robust Energy Management for Microgrids with High-Penetration Renewables,” *IEEE Transactions on Sustainable Energy*, vol. 4, no. 4, pp. 944-953, October 2013.
- [J87] G. B. Giannakis, V. Kekatos, N. Gatsis, S.-J. Kim, H. Zhu, and B. Wollenberg, “Monitoring and Optimization for Power Grids: A Signal Processing Perspective,” *IEEE Signal Processing Magazine*, vol. 30, no. 5, pp. 107-128, September 2013.
- [J88] E. Dall’Anese, H. Zhu, and G. B. Giannakis, “Distributed Optimal Power Flow for Smart Microgrids,” *IEEE Transactions on Smart Grid*, vol. 4, no. 3, pp. 1464-1475, September 2013.
- [J89] M. Mardani, G. Mateos, and G. B. Giannakis, “Recovery of Low-Rank Plus Compressed Sparse Matrices with Application to Unveiling Traffic Anomalies,” *IEEE Transactions on Information Theory*, vol. 59, no. 8, pp. 5186-5205, August 2013.
- [J90] S.-J. Kim, N. Y. Soltani, and G. B. Giannakis, “Resource Allocation for OFDMA Cognitive Radios under Channel Uncertainty,” *IEEE Transactions on Wireless Communications*, vol. 12, no. 7, pp. 3578-3587, July 2013.
- [J91] J. A. Bazerque and G. B. Giannakis, “Nonparametric Basis Pursuit via Sparse Kernel-based Learning,” *IEEE Signal Processing Magazine*, vol. 30, no. 4, pp. 112-125, July 2013.
- [J92] X. Cai, J. A. Bazerque, and G. B. Giannakis, “Sparse Structural Equation Modeling for Inference of Gene Regulatory Networks Exploiting Genetic Perturbations,” *PLoS, Computational Biology*, June 2013.
- [J93] V. Kekatos and G. B. Giannakis, “Distributed Robust Power System State Estimation,” *IEEE Transactions on Power Systems*, vol. 28, no. 2, pp. 1617-1626, May 2013.
- [J94] O. Mehanna, N. D. Sidiropoulos, and G. B. Giannakis, “Joint Multicast Beamforming and Antenna Selection,” *IEEE Transactions on Signal Processing*, vol. 61, no. 10, pp. 2660-2674, May 2013.

2012

- [J95] N. Y. Soltani, S.-J. Kim, and G. B. Giannakis, "Chance-Constrained Optimization of OFDMA Cognitive Radio Uplinks," *IEEE Transactions on Wireless Communications*, vol. 12, no. 3, pp. 1098-1107, March 2013.
- [J96] M. Mardani, G. Mateos, and G. B. Giannakis, "Dynamic Anomalography: Tracking Network Anomalies via Sparsity and Low Rank," *IEEE Journal of Selected Topics in Signal Processing*, vol. 7, no. 1, pp. 50-66, February 2013.
- [J97] Y. Zhang, E. Dall'Anese, and G. B. Giannakis, "Distributed Optimal Beamformers for Cognitive Radios Robust to Channel Uncertainties," *IEEE Transactions on Signal Processing*, vol. 60, no. 12, pp. 6495- 6508, December 2012.
- [J98] K. Rajawat, A. Cano, and G. B. Giannakis, "Network-Compressive Coding for Wireless Sensors with Correlated Data," *IEEE Transactions on Wireless Communications*, vol. 11, no. 12, pp. 4264-4274, December 2012.
- [J99] S.-J. Kim, E. Dall'Anese, J. A. Bazerque, K. Rajawat, and G. B. Giannakis, "Advances in Spectrum Sensing and Cross-Layer Design for Cognitive Radio Networks," *EURASIP, E-Reference Signal Processing*, November 2012.
- [J100] A. G. Marques, L. M. Lopez-Ramos, G. B. Giannakis, and J. Ramos, "Resource Allocation for Interweave and Underlay Cognitive Radios under Probability-of-Interference Constraints," *IEEE Journal on Selected Areas in Communications*, vol. 30, no. 10, pp. 1922-1933, November 2012.
- [J101] E. Dall'Anese and G. B. Giannakis, "Statistical Routing for Multihop Wireless Cognitive Networks," *IEEE Journal on Selected Areas in Communications*, vol. 30, no. 10, pp. 1983-1993, November 2012.
- [J102] H. Zhu, and G. B. Giannakis, "Sparse Overcomplete Representations for Efficient Identification of Power Line Outages," *IEEE Transactions on Power Systems*, vol. 27, no. 4, pp. 2214-2215, November 2012.
- [J103] G. Mateos and G. B. Giannakis, "Robust PCA as Bilinear Decomposition with Outlier-Sparsity Regularization," *IEEE Transactions on Signal Processing*, vol. 60, no. 10, pp. 5176-5190, October 2012.
- [J104] P. Forero, and G. B. Giannakis, "Sparsity-Exploiting Robust Multidimensional Scaling," *IEEE Transactions on Signal Processing*, vol. 60, no. 08, pp. 4118-4134, August 2012.
- [J105] V. Kekatos, G. B. Giannakis, and B. Wollenberg, "Optimal Placement of Phasor Measurement Units via Convex Relaxation," *IEEE Transactions on Power Systems*, vol. 27, no. 03, pp. 1521-1530, August 2012.
- [J106] P. Forero, V. Kekatos, and G. B. Giannakis, "Robust Clustering using Outlier-Sparsity Regularization," *IEEE Transactions on Signal Processing*, vol. 60, no. 8, pp. 4163-4177, August 2012.
- [J107] G. Mateos, and G. B. Giannakis, "Distributed Recursive Least-Squares: Stability and Performance Analysis," *IEEE Transactions on Signal Processing*, vol. 60, no. 7, pp. 3740-3754, July 2012.
- [J108] A. G. Marques, L. M. Lopez-Ramos, G. B. Giannakis, J. Ramos, and A. J. Caamano, "Cross-Layer Resource Allocation for Cellular Networks using Channel and Queue State Information," *IEEE Transactions on Vehicular Technology*, vol. 61, no. 07, pp. 2789-2807, July 2012.

- [J109] E. Dall’Anese, J. A. Bazerque, and G. B. Giannakis, “Group Sparse Lasso for Cognitive Network Sensing Robust to Model Uncertainties and Outliers,” *Physical Communication*, Elsevier, June 2012.
- [J110] N. Gatsis, and G. B. Giannakis, “Residential Load Control: Distributed Scheduling and Convergence with Lost AMI Messages,” *IEEE Transactions on Smart Grid*, vol. 3, no. 2, pp. 770-786, June 2012 .
- [J111] S. Farahmand, and G. B. Giannakis, “Robust RLS in the Presence of Colored Noise using Outlier Sparsity,” *IEEE Transactions on Signal Processing*, vol. 60, no. 6, pp. 3308-3313, June 2012.
- [J112] M. Mardani, S.-J. Kim, and G. B. Giannakis, “Cross-layer Design of Wireless Multihop Random Access Networks,” *IEEE Transactions on Signal Processing*, vol. 60, no. 5, pp. 2562-2574, May 2012.
- [J113] I. D. Schizas, and G. B. Giannakis, “Covariance-Domain Sparsity for Compression and Denoising,” *IEEE Transactions on Signal Processing*, vol. 60, no. 5, pp. 2408-2421, May 2012.
- [J114] G. Mateos, and G. B. Giannakis, “Robust Nonparametric Regression via Sparsity Control with Application to Load Curve Data Cleansing,” *IEEE Transactions on Signal Processing*, vol. 60, no. 4, pp. 1571-1584, April 2012.
- [J115] D. Angelosante, and G. B. Giannakis, “Group Lassoing Changes in Piecewise-Stationary Autoregressive Processes,” *EURASIP Journal on Advances in Signal Processing*, March 2012.
- [J116] Z. Wang, S. Zhou, G. B. Giannakis, C. R. Berger, and J. Huang, “Frequency-Domain Oversampling for Zero-Padded OFDM in Underwater Acoustic Communications,” *IEEE Journal on Oceanic Engineering*, vol. 37, no. 1, pp. 14-24, January 2012.
- [J117] E. Msechu, and G. B. Giannakis, “Sensor-Centric Data Reduction for Estimation with WSNs via Censoring and Quantization,” *IEEE Transactions on Signal Processing*, vol. 60, no. 1, pp. 400-414, January 2012.
- 2011**
- [J118] K. Rajawat, N. Gatsis, S.-J. Kim, and G. B. Giannakis, “Cross-layer Design of Coded Multicast for Wireless Random Access Networks,” *IEEE Journal on Selected Areas in Communications*, vol. 29, no. 10, pp. 1970-1980, December 2011.
- [J119] V. Kekatos, and G. B. Giannakis, “Sparse Volterra and Polynomial Regression Models: Identifiability and Estimation,” *IEEE Transactions on Signal Processing*, vol. 59, no. 12, pp. 5907-5920, December 2011.
- [J120] K. Rajawat and G. B. Giannakis, “Joint Scheduling and Network Coding for Multicast in Delay-Constrained Wireless Networks,” *IEEE Transactions on Signal Processing*, vol. 59, no. 12, pp. 6186-6196, December 2011.
- [J121] K. Rajawat, N. Gatsis, and G. B. Giannakis, “Cross-Layer Designs in Coded Wireless Fading Networks with Multicast,” *IEEE Transactions on Networking*, vol. 19, no. 5, pp. 1276-1289, October 2011.
- [J122] E. Dall’Anese, S.-J. Kim, G. B. Giannakis, and S. Pupolin, “Power Control for Cognitive Radio Networks Under Channel Uncertainty,” *IEEE Transactions on Wireless Communications*, vol. 10, no. 10, pp. 3541-3551, October 2011.

- [J123] S.-J. Kim, G. Li, and G. B. Giannakis, "Multiband Cognitive Radio Spectrum Sensing for Quality-of-Service Traffic," *IEEE Transactions on Wireless Communications*, vol. 10, no. 10, pp. 3506-3515, October 2011.
- [J124] S. Farahmand, G. B. Giannakis, and D. Angelosante, "Doubly Robust Smoothing of Dynamical Processes via Outlier Sparsity Constraints," *IEEE Transactions on Signal Processing*, vol. 59, no. 10, pp. 4529-4543, October 2011.
- [J125] J. A. Bazerque, G. Mateos, and G. B. Giannakis, "Group-Lasso on Splines for Spectrum Cartography," *IEEE Transactions on Signal Processing*, vol. 59, no. 10, pp. 4648-4663, October 2011.
- [J126] A. G. Marques, G. B. Giannakis, and F. J. Ramos "Optimizing Orthogonal Multiple Access based on Quantized Channel State Information," *IEEE Transactions on Signal Processing*, vol. 59, no. 10, pp. 5023-5038, October 2011.
- [J127] S. Farahmand, S. Roumeliotis, and G. B. Giannakis, "Set-Membership Constrained Particle Filter: Distributed Adaptation for Sensor Networks," *IEEE Transactions on Signal Processing*, vol. 59, no. 9, pp. 4122-4138, September 2011.
- [J128] P. Forero, A. Cano, and G. B. Giannakis, "Distributed Clustering using Wireless Sensor Networks," *IEEE Journal of Selected Topics in Signal Processing*, vol. 5, no. 4, pp. 707-724, August 2011.
- [J129] V. Kekatos, and G. B. Giannakis, "From Sparse Signals to Sparse Residuals for Robust Sensing," *IEEE Transactions on Signal Processing*, vol. 59, no. 7, pp. 3355-3368, July 2011.
- [J130] X. Wang and G. B. Giannakis, "Resource Allocation for Wireless Multiuser OFDM Networks: Ergodic Capacity and Rate-Guaranteed Scheduling," *IEEE Transactions on Information Theory*, vol. 57, no. 7, pp. 4359-4372, July 2011.
- [J131] G. Li, A. Cano, J. Gomez-Viladerbo, G. B. Giannakis, and A.-I. Perez-Neira, "High-Throughput Cooperative Transmissions using Complex-Field Network Coding," *IEEE Transactions on Wireless Communications*, vol. 10, no. 5, pp. 1606-1617, May 2011.
- [J132] H. Zhu, G. Leus, and G. B. Giannakis, "Sparsity-Cognizant Total Least-Squares for Perturbed Compressive Sampling," *IEEE Transactions on Signal Processing*, vol. 59, no. 5, pp. 2002-2016, May 2011.
- [J133] S.-J. Kim, and G. B. Giannakis, "Optimal Resource Allocation for MIMO Ad Hoc Cognitive Radio Networks," *IEEE Transactions on Information Theory*, vol. 57, no. 5, pp. 3117-3131, May 2011.
- [J134] E. Dall'Anese, S.-J. Kim, and G. B. Giannakis, "Channel Gain Map Tracking via Distributed Kriging," *IEEE Transactions on Vehicular Technology*, vol. 60, no. 3, pp. 1205-1211, March 2011.
- [J135] H. Zhu and G. B. Giannakis, "Exploiting Sparse User Activity in Multiuser Detection," *IEEE Transactions on Communications*, vol. 59, no. 2, pp. 454-465, February 2011.
- [J136] S.-J. Kim, E. Dall'Anese, and G. B. Giannakis, "Cooperative Spectrum Sensing for Cognitive Radios using Kriged Kalman Filtering," *IEEE Journal of Selected Topics in Signal Processing*, vol. 5, no. 1, pp. 24-36, February 2011.

2010

- [J137] G. N. Lilis, D. Angelosante, and G. B. Giannakis, "Sound Field Reproduction using the Lasso," *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 18, no. 8, pp. 1902-1912, November 2010.
- [J138] G. Mateos, J.-A. Bazerque, and G. B. Giannakis, "Distributed Sparse Linear Regression," *IEEE Transactions on Signal Processing*, vol. 58, no. 10, pp. 5262-5276, October 2010.
- [J139] D. Angelosante, G. B. Giannakis, and N. D. Sidiropoulos, "Estimating Multiple Frequency-Hopping Signal Parameters via Sparse Linear Regression," *IEEE Transactions on Signal Processing*, vol. 58, no. 10, pp. 5044-5056, October 2010.
- [J140] A. Ribeiro and G. B. Giannakis, "Separation Principles in Wireless Networking," *IEEE Transactions on Information Theory*, vol. 56, no. 9, pp. 4488-4505, September 2010.
- [J141] S.-J. Kim, and G. B. Giannakis, "Sequential and Cooperative Sensing for Multichannel Cognitive Radios," *IEEE Transactions on Signal Processing*, vol. 58, no. 8, pp. 4239-4253, August 2010.
- [J142] D. Angelosante, J.-A. Bazerque, and G. B. Giannakis, "Online Adaptive Estimation of Sparse Signals: Where RLS meets the ℓ_1 -norm," *IEEE Transactions on Signal Processing*, vol. 58, no. 7, pp. 3436-3447, July 2010.
- [J143] H. Zhu, A. Cano, and G. B. Giannakis, "Distributed Consensus-Based Demodulation: Algorithms and Error Analysis," *IEEE Transactions on Wireless Communications*, vol. 9, no. 6, pp. 2044-2054, June 2010.
- [J144] D. Angelosante, E. Grossi, G. B. Giannakis, and M. Lops, "Sparsity-Aware Estimation of CDMA System Parameters," *EURASIP Journal on Advances in Signal Processing*, June 2010.
- [J145] N. Gatsis, A. Ribeiro, and G. B. Giannakis, "A Class of Convergent Algorithms for Resource Allocation in Wireless Fading Networks," *IEEE Transactions on Wireless Communications*, no. 5, pp. 1808-1823, May 2010.
- [J146] P. Forero, A. Cano, and G. B. Giannakis, "Consensus-Based Distributed Support Vector Machines," *Journal of Machine Learning Research*, vol. 11, pp. 1663-1707, May 2010.
- [J147] A. Ribeiro, I. D. Schizas, S. I. Roumeliotis and G. B. Giannakis, "Kalman Filtering in Wireless Sensor Networks: Incorporating communication cost in state estimation problems," *IEEE Control Systems Magazine*, vol. 30, pp. 66-86, April 2010.
- [J148] J.-A. Bazerque, and G. B. Giannakis, "Distributed Spectrum Sensing for Cognitive Radio Networks by Exploiting Sparsity," *IEEE Transactions on Signal Processing*, vol. 58, no. 3, pp. 1847-1862, March 2010.
- [J149] N. Gatsis, A. G. Marques and G. B. Giannakis, "Power Control for Cooperative Dynamic Spectrum Access Networks with Diverse QoS Constraints," *IEEE Transactions on Communications*, vol. 58, no. 3, pp. 933-944, March 2010.

2009

- [J150] G. Mateos, I. D. Schizas, and G. B. Giannakis, "Performance Analysis of the Consensus-Based Distributed LMS Algorithm," *EURASIP Journal on Advances in Signal Processing*, December 2009.

- [J151] T. Wang, and G. B. Giannakis, “Capacity Scaling of Wireless Networks with Complex Field Network Coding,” *Journal of Communications*, Special Issue on Network Coding and Applications, Academy Publisher, December 2009.
- [J152] G. Mateos, I. D. Schizas, and G. B. Giannakis, “Distributed Recursive Least-Squares for Consensus-Based In-Network Adaptive Estimation,” *IEEE Transactions on Signal Processing*, vol. 57, no. 11, pp. 4583-4588, November 2009.
- [J153] H. Zhu, G. B. Giannakis, and A. Cano, “Distributed In-Network Channel Decoding,” *IEEE Transactions on Signal Processing*, vol. 57, no. 10, pp. 3970-3983, October 2009.
- [J154] A. G. Marques, X. Wang, and G. B. Giannakis, “Dynamic Resource Management for Cognitive Radios using Limited-Rate Feedback,” *IEEE Transactions on Signal Processing*, vol. 57, no. 9, pp. 3651-3666, September 2009.
- [J155] S.-J. Kim, and G. B. Giannakis, “Rate-Optimal and Reduced-Complexity Sequential Sensing Algorithms for Cognitive OFDM Radios,” *EURASIP Journal on Advances in Signal Processing*, Special Issue on Dynamic Spectrum Access for Wireless Networking, Article ID 421540, September 2009.
- [J156] H. Zhu, I. Schizas and G. B. Giannakis, “Power-Efficient Dimensionality Reduction for Distributed Channel-Aware Kalman Tracking Using Wireless Sensor Networks,” *IEEE Transactions on Signal Processing*, vol. 57, no. 8, pp. 3193 - 3207, August 2009.
- [J157] I. D. Schizas, G. Mateos and G. B. Giannakis, “Distributed LMS for Consensus-Based In-Network Adaptive Processing,” *IEEE Transactions on Signal Processing*, vol. 57, no. 6, pp. 2365-2381, June 2009.
- 2008**
- [J158] A. Ribeiro, N. D. Sidiropoulos and G. B. Giannakis, “Optimal Distributed Stochastic Routing Algorithms for Wireless Multihop Networks,” *IEEE Transactions on Wireless Communications*, vol. 7, no. 11, pp. 4261-4272, November 2008.
- [J159] R. Wang, W. Zhao, and G. B. Giannakis, “CRC-Assisted Error Correction in a Convolutionally Coded System,” *IEEE Transactions on Communications*, vol. 56, no. 11, pp. 1807-1815, November 2008.
- [J160] T. Wang, G. B. Giannakis, and R. Wang, “Smart Regenerative Relays for Link-Adaptive Cooperation,” *IEEE Transactions on Communications*, vol. 56, no. 11, pp. 1950-1960, November 2008.
- [J161] S. Farahmand, X. Luo, and G. B. Giannakis, “Orthogonally-Spread Block Transmissions for High-Rate UWB Radios,” *IEEE Transactions on Wireless Communications*, vol. 7, no. 10, pp. 3668-3673, October 2008.
- [J162] X. Wang, A. G. Marques, and G. B. Giannakis, “Power-Efficient Resource Allocation and Quantization for TDMA Using Adaptive Transmission and Limited-Rate Feedback,” *IEEE Transactions on Signal Processing*, vol. 56, no. 4470-4485, September 2008.
- [J163] A. G. Marques, X. Wang, and G. B. Giannakis, “Minimizing Transmit-Power for Coherent Communications in Wireless Sensor Networks with Finite-Rate Feedback,” *IEEE Transactions on Signal Processing*, vol. 56, no. 8, pp. 4446-4457, September 2008.

- [J164] E. J. Msechu, S. D. Roumeliotis, A. Ribeiro, and G. B. Giannakis, “Decentralized Quantized Kalman Filtering with Scalable Communication Cost,” *IEEE Transactions on Signal Processing*, vol. 56, no. 8, pp. 3727-3741, August 2008.
- [J165] J.-A. Bazerque and G. B. Giannakis, “Distributed Scheduling and Resource Allocation for Cognitive OFDMA Radios,” *Journal of ACM on Mobile Networks and Applications*, Springer, July 2008 (invited).
- [J166] T. Wang and G. B. Giannakis, “Mutual-Information Jammer-Relay Games,” *IEEE Transactions on Information Forensics and Security*, vol. 3, no. 2, pp. 290-303, June 2008.
- [J167] I. D. Schizas, G. B. Giannakis and N. Jindal, “Distortion-Rate Analysis for Distributed Estimation with Wireless Sensor Networks,” *EURASIP Journal on Advances in Signal Processing*, Special Issue on Distributed Signal Processing Techniques for Wireless Sensor Networks, May 2008.
- [J168] T. Wang and G. B. Giannakis, “Complex Field Network Coding for Multiuser Cooperative Communications,” *IEEE Journal on Selected Topics in Communications*, vol. 26, no. 3, pp. 561-571, April 2008.
- [J169] I. D. Schizas, G. B. Giannakis, S. D. Roumeliotis and A. Ribeiro, “Consensus in Ad Hoc WSNs with Noisy Links - Part II: Distributed Estimation and Smoothing of Random Signals,” *IEEE Transactions on Signal Processing*, vol. 56, no. 4, pp. 1650-1666, April 2008.
- [J170] X. Wang and G. B. Giannakis, “Power-Efficient Resource Allocation in Time Division Multi-Access over Fading Channels,” *IEEE Transactions on Information Theory*, vol. 54, no. 3, pp. 1225-1240, March 2008.
- [J171] X. Wang, Y. Yu, and G. B. Giannakis, “Design and Analysis of Cross-Layer Tree Algorithms for Wireless Random Access,” *IEEE Transactions on Wireless Communications*, vol. 7, no. 3, pp. 909-919, March 2008.
- [J172] A. Cano, T. Wang, A. Ribeiro, and G. B. Giannakis, “Link-Adaptive Distributed Coding for Multi-Source Cooperation,” *EURASIP Journal on Advances in Signal Processing*, March 2008.
- [J173] A. G. Marques, G. B. Giannakis, F. Digham, and F. J. Ramos, “Power-Efficient Wireless OFDMA using Limited-Rate Feedback,” *IEEE Transactions on Wireless Communications*, vol. 7, no. 2, pp. 685-696, February 2008.
- [J174] X. Luo and G. B. Giannakis, “Energy-Constrained Optimal Quantization for Wireless Sensor Networks,” *EURASIP Journal on Advances in Signal Processing*, Special Issue on Distributed Signal Processing Techniques for Wireless Sensor Networks, February 2008.
- [J175] S. Shahbazpanahi, A. Gershman, and G. B. Giannakis, “Blind and Semiblind Channel and Carrier Frequency-Offset Estimation in Orthogonally Space-Time Block Coded MIMO Systems,” *IEEE Transactions on Signal Processing*, vol. 56, no. 2, pp. 702-711, February 2008.
- [J176] Y. Yu and G. B. Giannakis, “Cross-Layer Congestion and Contention Control for Wireless Ad Hoc Networks,” *IEEE Transactions on Wireless Communications*, vol. 7, no. 1, pp. 37-42, January 2008.

2007

- [J177] I. D. Schizas, A. Ribeiro and G. B. Giannakis, “Consensus in Ad Hoc WSNs with Noisy Links - Part I: Distributed Estimation of Deterministic Signals,” *IEEE Transactions on Signal Processing*, vol. 56, no. 1, pp. 350-364, January 2008.
- [J178] X. Wang, Y. Yu and G. B. Giannakis, “A Robust High-Throughput Tree Algorithm Using Successive Interference Cancellation,” *IEEE Transactions on Communications*, vol. 55, no. 12, pp. 2253-2256, December 2007.
- [J179] Y. Yu and G. B. Giannakis, “High-Throughput Random Access Using Successive Interference Cancellation in a Tree Algorithm,” *IEEE Transactions on Information Theory*, vol. 53, no. 12, pp. 4628-4639, December 2007.
- [J180] X. Wang, G. B. Giannakis, and A. G. Marques, “A Unified Approach to QoS-Guaranteed Scheduling for Channel-Adaptive Wireless Networks,” *Proceedings of the IEEE*, vol. 95, no. 12, pp. 2410-2431, December 2007 (invited).
- [J181] I. Schizas, G. B. Giannakis and Z.-Q. Luo, “Distributed Estimation Using Reduced-Dimensionality Sensor Observations,” *IEEE Transactions on Signal Processing*, vol. 55, no. 8, pp. 4284-4299, August 2007.
- [J182] T. Wang, A. Cano, G. B. Giannakis, and F. J. Ramos, “Multi-Tier Cooperative Broadcasting with Hierarchical Modulations,” *IEEE Transactions on Communications*, vol. 6, no. 8, pp. 3047-3057, August 2007.
- [J183] T. Wang, A. Cano, G. B. Giannakis and N. Laneman, “High-Performance Cooperative Demodulation with Decode-and-Forward Relays,” *IEEE Transactions on Communications*, vol. 55, no. 7, pp. 1427-1438, July 2007.
- [J184] L. Yang, G. B. Giannakis and A. Swami, “Non-Coherent Ultra-Wideband Radios,” *IEEE Transactions on Communications*, vol. 55, no. 4, pp. 810-819, April 2007.
- [J185] Q. Tang, L. Yang, G. B. Giannakis and T. Qin, “Battery Power Efficiency of PPM and FSK in Wireless Sensor Networks,” *IEEE Transactions on Wireless Communications*, vol. 6, no. 4, pp. 1308 - 1319, April 2007.
- [J186] X. Wang, Q. Liu, and G. B. Giannakis, “Analyzing and Optimizing Adaptive Modulation and Coding Jointly with Truncated ARQ for QoS-Guaranteed Traffic,” *IEEE Transactions on Vehicular Technology*, vol. 56, no. 2, pp. 710-720, March 2007.
- [J187] Y. Yu, G. B. Giannakis and N. Jindal, “Information-Bearing Noncoherently Modulated Pilots for MIMO Training,” *IEEE Transactions on Information Theory*, vol. 53, no. 3, pp. 1160-1168, March 2007.
- [J188] A. Ribeiro, R. Wang, and G. B. Giannakis, “Multi-Source Cooperative Protocols with Full-Diversity, Spectral-Efficiency and Controllable-Complexity,” *IEEE Journal on Selected Areas in Communications*, vol. 25, no. 2, pp. 415-425, February 2007.
- [J189] A. Ribeiro, N. D. Sidiropoulos, G. B. Giannakis, and Y. Yu, “Achieving Wireline Random Access Throughput in Wireless Networking via User Cooperation,” *IEEE Transactions on Information Theory*, vol. 53, no. 2, pp. 732-758, February 2007.

2006

- [J190] X. Luo and G. B. Giannakis, "Raise Your Voice at a Proper Pace to Synchronize Multiple Ad Hoc Piconets," *IEEE Transactions on Signal Processing*, vol. 55, no. 1, pp. 267-278, January 2007.
- [J191] J.-J. Xiao, Z.-Q. Luo and G. B. Giannakis, "Performance Bounds for the Rate-Constrained Universal Decentralized Estimators," *IEEE Signal Processing Letters*, vol. 14, no. 1, pp. 47-50, January 2007.
- [J192] A. Ribeiro, G. B. Giannakis, and S. Roumeliotis, "SOI-KF: Distributed Kalman Filtering with Low-Cost Communications using the Sign of Innovations," *IEEE Transactions on Signal Processing*, vol. 54, no. 12, pp. 4782-4795, December 2006.
- [J193] T. Wang, Y. Yao and G. B. Giannakis, "Non-Coherent Distributed Space-Time Processing for Multiuser Cooperative Transmissions," *IEEE Transactions on Wireless Communications*, vol. 5, no. 12, pp. 3339-3343, December 2006.
- [J194] P. Xia, and G. B. Giannakis, "Conditions for Multi-Antenna Selection To Be Optimal Given Channel Amplitude-Only Information," *IEEE Transactions on Wireless Communications*, vol. 5, no. 11, pp. 3007-3011, November 2006.
- [J195] L. Yang, and G. B. Giannakis, "Cross-band flexible UWB multiple access for high-rate multi-piconet WPANs," *IEEE Transactions on Communications*, vol. 54, no. 11, pp. 2023-2032, November 2006.
- [J196] X. Wang and G. B. Giannakis, "CSMA/CCA: A Modified CSMA/CA Protocol Mitigating the Fairness Problem for IEEE 802.11 DCF," *EURASIP Journal on Wireless Communications and Networking*, Special Issue on Quality of Service in Mobile Ad Hoc Networks, October 2006.
- [J197] X. Luo and G. B. Giannakis, "Achievable Rates of Transmitted-Reference Ultra-Wideband Radio with PPM," *IEEE Transactions on Communications*, vol. 54, no. 9, pp. 1536-1541, September 2006.
- [J198] S. Shahbazpanahi, A. Gershman, and G. B. Giannakis, "Semi-Blind Multi-User MIMO Channel Estimation Using Capon and MUSIC Techniques," *IEEE Transactions on Signal Processing*, vol. 54, no. 9, pp. 3581-3591, September 2006.
- [J199] X. Luo and G. B. Giannakis, "Cyclic-Mean Based Synchronization and Efficient Demodulation for UWB Ad Hoc Access: Generalizations and Comparisons," *EURASIP Journal on Applied Signal Processing*, vol. 86, no. 9, pp. 2139-2152, September 2006.
- [J200] A. Ribeiro, X. Cai and G. B. Giannakis, "Opportunistic Multipath for Bandwidth-Efficient Cooperative Networking," *IEEE Transactions on Wireless Communications*, vol. 5, no. 8, pp. 2321-2327, August 2006.
- [J201] A. G. Marques, F. D. Digham and G. B. Giannakis, "Optimizing Power Efficiency of OFDM Using Quantized Channel State Information," *IEEE Journal on Selected Areas in Communications*, vol. 24, no. 8, pp. 1581-1592, August 2006.
- [J202] X. Luo and G. B. Giannakis, "Low-Complexity Blind Synchronization and Demodulation for (Ultra-) Wideband Multi-User Ad Hoc Access," *IEEE Transactions on Wireless Communications*, vol. 5, no. 7, pp. 1930-1941, July 2006.
- [J203] J.-J. Xiao, A. Ribeiro, Z.-Q. Luo and G. B. Giannakis, "Distributed Compression-Estimation Using Wireless Sensor Networks," *IEEE Signal Processing Magazine*, vol. 23, no. 4, pp. 27-41, July 2006.

- [J204] A. Ribeiro and G. B. Giannakis, "Bandwidth-Constrained Distributed Estimation for Wireless Sensor Networks, Part II: Unknown PDF," *IEEE Transactions on Signal Processing*, vol. 54, no. 7, pp. 2784-2796, July 2006.
- [J205] X. Cai and G. B. Giannakis, "Identifying Differentially Expressed Genes in Microarray Experiments with Model-Based Variance Estimation," *IEEE Transactions on Signal Processing*, vol. 54, no. 6, pp. 2418-2426, June 2006.
- [J206] Y. Yu and G. B. Giannakis, "Opportunistic Medium Access for Wireless Networking Adapted to Decentralized CSI," *IEEE Transactions on Wireless Communications*, vol. 5, no. 6, pp. 1445-1455, June 2006.
- [J207] S. Ohno, G. B. Giannakis, and Z.-Q. Luo, "Multi-Carrier Multiple Access is Sum-Rate Optimal for Block Transmissions over Circulant ISI Channels," *IEEE Journal on Selected Areas in Communications*, vol. 24, no. 6, pp. 1256-1260, June 2006.
- [J208] X. Wu, Z. Tian, T. N. Davidson and G. B. Giannakis, "Orthogonal Waveform Design for UWB Radios," *IEEE Transactions on Signal Processing*, vol. 54, no. 6, pp. 2009-2021, June 2006.
- [J209] Q. Liu, X. Wang and G. B. Giannakis, "A Cross-Layer Scheduling Algorithm with QoS Support in Wireless Networks," *IEEE Transactions on Vehicular Technology*, vol. 55, no. 3, pp. 839-847, May 2006.
- [J210] * P. Xia, and G. B. Giannakis, "Design and Analysis of Transmit-Beamforming based on Limited-Rate Feedback," *IEEE Transactions on Signal Processing*, vol. 54, no. 5, pp. 1853-1863, May 2006.
* **Received the IEEE SPS Senior Best Paper Award in 2011**
- [J211] Q. Liu, S. Zhou and G. B. Giannakis, "Cross-Layer Modeling of Adaptive Wireless Links for QoS Support in Heterogeneous Wired-Wireless Networks," *ACM/Kluwer Journal on Wireless Networks (WINET)*, vol. 12, pp. 427-437, May 2006.
- [J212] R. Wang, and G. B. Giannakis, "Approaching MIMO Channel Capacity with Reduced-Complexity Sphere Decoding," *IEEE Transactions on Communications*, vol. 54, no. 4, pp. 587-590, April 2006.
- [J213] X. Cai, and G. B. Giannakis, "Differential Space-Time Modulation with Transmit-Beamforming for Correlated MIMO Fading Channels," *IEEE Transactions on Signal Processing*, vol. 54, no. 4, pp. 1279-1288, April 2006.
- [J214] A. Ribeiro and G. B. Giannakis, "Fixed and Random Access Cooperative Networks," *EURASIP Newsletter*, pp. 3-24, March 2006 (invited tutorial).
- [J215] A. Ribeiro and G. B. Giannakis, "Bandwidth-Constrained Distributed Estimation for Wireless Sensor Networks, Part I: Gaussian PDF," *IEEE Transactions on Signal Processing*, vol. 54, no. 3, pp. 1131-1143, March 2006.
- [J216] Y. Yu, X. Cai and G. B. Giannakis, "On the Instability of Slotted Aloha with Capture," *IEEE Transactions on Wireless Communications*, vol. 5, no. 2, pp. 257-261, February 2006.
- [J217] L. Rugini, B. Banelli and G. B. Giannakis, "Local ML-Detection for Multicarrier DS-SS Downlink Systems with Group Linear Precoding," *IEEE Transactions on Wireless Communications*, vol. 5, no. 2, pp. 306-311, February 2006.

2005

- [J218] W. Zhao, and G. B. Giannakis, “Reduced Complexity Closest Point Decoding Algorithms for Random Lattices,” *IEEE Transactions on Wireless Communications*, vol. 5, no. 1, pp. 101 - 111, January 2006.
- [J219] A. Cano, X. Ma and G. B. Giannakis, “Block-Differential Modulation for Doubly-Selective Wireless Fading Channels,” *IEEE Transactions on Communications*, vol. 53, no. 12, pp. 2157-2166, December 2005.
- [J220] E. Serpedin, F. Panduru, I. Sari, and G. B. Giannakis, “Bibliography on cyclostationarity,” *Signal Processing*, Elsevier, vol. 85, no. 12, pp. 2233-2303, December 2005.
- [J221] Z. Tian and G. B. Giannakis, “A GLRT Approach to Data-Aided Timing Acquisition in UWB Radios - Part II: Training Sequence Design,” *IEEE Transactions on Wireless Communications*, vol. 4, no. 6, pp. 2994-3004, November 2005.
- [J222] Z. Tian and G. B. Giannakis, “A GLRT Approach to Data-Aided Timing Acquisition in UWB Radios - Part I: Algorithms,” *IEEE Transactions on Wireless Communications*, vol. 4, no. 6, pp. 2956-2967, November 2005.
- [J223] Y. Yao, X. Cai, and G. B. Giannakis, “On Energy Efficiency and Optimum Resource Allocation in Wireless Relay Transmissions,” *IEEE Transactions on Wireless Communications*, vol. 4, no. 6, pp. 2917-2927, November 2005.
- [J224] L. Yang and G. B. Giannakis, “Timing UWB Signals using Dirty Templates,” *IEEE Transactions on Communications*, vol. 53, no. 11, pp. 1952-1963, November 2005.
- [J225] M.-K. Oh, X. Ma, G. B. Giannakis, and D.-J. Park, “Cooperative Synchronization and Channel Estimation in Wireless Sensor Networks,” *Journal on Communications and Networks*, vol. 7, no. 3, pp. 284-293, September 2005.
- [J226] S. Farahmand, X. Luo, and G. B. Giannakis, “Demodulation and Tracking with Dirty Templates for UWB Impulse Radio: Algorithms and Performance,” *IEEE Transactions on Vehicular Technology*, vol. 54, no. 5, pp. 1595-1608, September 2005 (invited).
- [J227] Y. Yao and G. B. Giannakis, “Energy-Efficient Scheduling for Wireless Sensor Networks,” *IEEE Transactions on Communications*, vol. 53, no. 8, pp. 1333-1342, August 2005.
- [J228] S. Zhou, Z. Wang and G. B. Giannakis “Quantifying the Power-Loss when Transmit-Beamforming relies on Finite Rate Feedback,” *IEEE Transactions on Wireless Communications*, vol. 4, no. 4, pp. 1948-1957, July 2005.
- [J229] L. Yang, and G. B. Giannakis, “A General Model and SINR Analysis of Low Duty-Cycle UWB Access through Multipath and NBI with Rake Reception,” *IEEE Transactions on Wireless Communications*, vol. 4, no. 4, pp. 1818-1833, July 2005.
- [J230] W. Zhao, and G. B. Giannakis, “Sphere Decoding Algorithms with Improved Radius Search,” *IEEE Transactions on Communications*, vol. 53, no. 7, pp. 1104-1109, July 2005.
- [J231] S. Gezici, Z. Tian, G. B. Giannakis, H. Kobayashi, A. V. Molisch, H. V. Poor and Z. Sahinoglu, “Localization via Ultra-Wideband Radios,” *IEEE Signal Processing Magazine*, vol. 22, no. 4, pp. 70-84, July 2005.

- [J232] X. Ma, G. Leus, and G. B. Giannakis, "Space-Time-Doppler Coding for Correlated Time-Selective Fading Channels," *IEEE Transactions on Signal Processing*, vol. 53, no. 6, pp. 2167-2181, June 2005.
- [J233] A. Ribeiro, X. Cai, and G. B. Giannakis, "Symbol Error Probabilities for General Cooperative Links," *IEEE Transactions on Wireless Communications*, vol. 4, no. 3, pp. 1264-1273, May 2005.
- [J234] Q. Liu, S. Zhou, and G. B. Giannakis, "Queuing with Adaptive Modulation and Coding over Wireless Links: Cross-Layer Analysis and Design," *IEEE Transactions on Wireless Communications*, vol. 4, no. 3, pp. 1142-1153, May 2005.
- [J235] Y. Yao, and G. B. Giannakis, "Rate-Maximizing Power Allocation in OFDM Based on Partial Channel Knowledge," *IEEE Transactions on Wireless Communications*, vol. 4, no. 3, pp. 1073-1083, May 2005.
- [J236] P. Xia, S. Zhou and G. B. Giannakis, "Achieving the Welch Bound with Difference Sets," *IEEE Transactions on Information Theory*, vol. 51, no. 5, pp. 1900-1907, May 2005.
- [J237] Q. Liu, S. Zhou and G. B. Giannakis, "Cross-Layer Scheduling with Predictable QoS Guarantees in Adaptive Wireless Networks," *IEEE Journal on Selected Areas in Communications*, vol. 23, no. 5, pp. 1051-1066, May 2005.
- [J238] Z. Tian, and G. B. Giannakis, "BER Sensitivity to Mis-Timing in Ultra-Wideband Communications, Part II: Fading Channels" *IEEE Transactions on Signal Processing*, vol. 53, no. 5, pp. 1897-1907, May 2005.
- [J239] Y. Yao, and G. B. Giannakis, "On Regularity and Identifiability of Blind Source Separation under Constant Modulus Constraints," *IEEE Transactions on Signal Processing*, vol. 53, no. 4, pp. 1272-1281, April 2005.
- [J240] Z. Tian, and G. B. Giannakis, "BER Sensitivity to Mis-Timing in Ultra-Wideband Communications, Part I: Non-Random Channels" *IEEE Transactions on Signal Processing*, vol. 53, no. 4, pp. 1550-1560, April 2005.
- [J241] P. Xia, S. Zhou, and G. B. Giannakis, "Multi-Antenna Adaptive Modulation with Beamforming based on Bandwidth-Constrained Feedback," *IEEE Transactions on Communications*, vol. 53, no. 3, pp. 526-536, March 2005.
- [J242] X. Cai, G. B. Giannakis and M. Zoltowski, "Space-Time Spreading and Block Coding for Correlated Fading Channels in the Presence of Interference," *IEEE Transactions on Communications*, vol. 53, no. 3, pp. 515-525, March 2005.
- [J243] W. Zhao and G. B. Giannakis, "Reduced-Complexity Receivers for Layered Space-Time Binary CPM," *IEEE Transactions on Wireless Communications*, vol. 4, no. 2, pp. 574-582, March 2005.
- [J244] X. Ma, L. Yang, and G. B. Giannakis, "Optimal Training for MIMO Frequency-Selective Fading Channels," *IEEE Transactions on Wireless Communications*, vol. 4, no. 2, pp. 453-466, March 2005.
- [J245] X. Ma, and G. B. Giannakis, "Space-Time-Multipath Coding using Digital Phase Sweeping or Block Circular Delay Diversity," *IEEE Transactions on Signal Processing*, vol. 53, no. 3, pp. 1121-1131, March 2005.

- [J246] ★ G. B. Giannakis, P. Anghel and Z. Wang, “Generalized Multi-Carrier CDMA: Unification and Equalization,” *Eurasip Journal of Applied Signal Processing*, pp. 743-756, February 2005.
★ **Received the EURASIP’s Best Paper Award in 2009**
- [J247] X. Cai, Y. Yao, and G. B. Giannakis, “Achievable Rates in Low-Power Relay-Links over Fading Channels,” *IEEE Transactions on Communications*, vol. 53, no. 1, pp. 184-194, January 2005.
- [J248] Y. Yao, and G. B. Giannakis, “Blind Carrier-Frequency Offset Estimation of SISO, MIMO, and Multi-User OFDM,” *IEEE Transactions on Communications*, vol. 53, no. 1, pp. 173-183, January 2005.
- [J249] X. Ma, M.-K. Oh, G. B. Giannakis, and D.-J. Park, “Hopping Pilots for Estimation of Frequency-Offsets and Multi-Antenna Channels in MIMO-OFDM,” *IEEE Transactions on Communications*, vol. 53, no. 1, pp. 162-172, January 2005.
- 2004 [J250] X. Cai, and G. B. Giannakis, “Adaptive PSAM Accounting for Channel Estimation and Prediction Errors,” *IEEE Transactions on Wireless Communications*, vol. 4, no. 1, pp. 246-256, January 2005.
- [J251] X. Cai, and G. B. Giannakis, “Performance Analysis of Combined Transmit Selection Diversity and Receive Generalized Selection Combining in Rayleigh Fading channels,” *IEEE Transactions on Wireless Communications*, vol. 3, no. 6, pp. 1980-1983, November 2004.
- [J252] R. Wang, X. Ma and G. B. Giannakis, “Improving the Performance of Coded FDFR Multi-Antenna Systems with Turbo-Decoding,” *Wireless Communications and Mobile Computing*, no. 4, pp. 711-725, November 2004.
- [J253] L. Yang, and G. B. Giannakis, “Ultra-Wideband Communications: An Idea whose Time has Come,” *IEEE Signal Processing Magazine*, vol. 21, no. 6, pp. 26-54, November 2004.
- [J254] Q. Liu, S. Zhou, and G. B. Giannakis, “Cross-Layer Combining of Adaptive Modulation and Coding with Truncated ARQ over Wireless Links,” *IEEE Transactions on Wireless Communications*, vol. 3, no. 5, pp. 1746-1755, September 2004.
- [J255] S. Zhou, and G. B. Giannakis, “Adaptive Modulation for Multi-Antenna Transmissions with Channel Mean Feedback,” *IEEE Transactions on Wireless Communications*, vol. 3, no. 5, pp. 1626-1636, September 2004.
- [J256] S. Ohno and G. B. Giannakis, “Capacity Maximizing MMSE-Optimal Pilots and Precoders for Wireless OFDM over Rapidly Fading Channels,” *IEEE Transactions on Information Theory*, vol. 50, no. 9, pp. 2138-2145, September 2004.
- [J257] L. Yang, and G. B. Giannakis, “Optimal Pilot Waveform Assisted Modulation for Ultra-Wideband Communications,” *IEEE Transactions on Wireless Communications*, vol. 3, no. 4, pp. 1236-1249, July 2004.
- [J258] S. Zhou, and G. B. Giannakis, “How Accurate Channel Prediction Needs to be for Transmit-Beamforming with Adaptive Modulation over Rayleigh MIMO Channels ? ” *IEEE Transactions on Wireless Communications*, vol. 3, no. 4, pp. 1285-1294, July 2004.
- [J259] W. Zhao, G. Leus, and G. B. Giannakis, “Orthogonal Design of Unitary Constellations for Uncoded and Trellis Coded Non-Coherent Space-Time Systems,” *IEEE Transactions on Information Theory*, vol. 50, no. 6, pp. 1319-1327, June 2004.

- [J260] Z. Wang, S. Zhou, and G. B. Giannakis, "Joint Coding-Precoding with Low-Complexity Turbo-Decoding," *IEEE Transactions on Wireless Communications*, vol. 3, no. 3, pp. 832-842, May 2004.
- [J261] Y. Larsen, G. Leus, and G. B. Giannakis, "Constant Modulus and Reduced PAPR Block Differential Encoding for Frequency-Selective Channels," *IEEE Transactions on Communications*, vol. 52, no. 4, pp. 622-631, April 2004.
- [J262] Z. Wang, and G. B. Giannakis, "Outage Mutual Information for Space-Time MIMO Channels," *IEEE Transactions on Information Theory*, vol. 50, no. 4, pp. 657-662, April 2004.
- [J263] Z.-Q. Luo, T. N. Davidson, G. B. Giannakis, and M. K. Wong, "Transceiver Optimization for Multiple Access," *IEEE Transactions on Signal Processing*, vol. 52, no. 4, pp. 1037-1052, April 2004.
- [J264] Z. Wang, X. Ma, and G. B. Giannakis, "OFDM or Single-Carrier Block Transmissions?," *IEEE Transactions on Communications*, vol. 52, no. 3, pp. 380-394, March 2004.
- [J265] X. Ma, G. B. Giannakis and B. Lu, "Block Differential Encoding for Rapidly Fading Channels," *IEEE Transactions on Communications*, vol. 52, no. 3, pp. 416-425, March 2004.
- [J266] L. Yang, and G. B. Giannakis, "Analog Space-Time Coding for Multi-Antenna Ultra-Wideband Transmissions," *IEEE Transactions on Communications*, vol. 52, no. 3, pp. 507-517, March 2004.
- [J267] G. Leus, W. Zhao, G. B. Giannakis, and H. Delic, "Space-Time Frequency Shift-Keying," *IEEE Transactions on Communications*, vol. 52, no. 3, pp. 346-349, March 2004.
- [J268] A. Stamoulis, N. Sidiropoulos, and G. B. Giannakis, "Time-Varying Fair Queuing Scheduling for Multicode CDMA based on Dynamic Programming," *IEEE Transactions on Wireless Communications*, vol. 3, no. 2, pp. 512-523, March 2004.
- [J269] X. Cai, and G. B. Giannakis, "Error Probability Minimizing Pilots for OFDM with M-PSK Modulation over Rayleigh Fading channels," *IEEE Transactions on Vehicular Technology*, vol. 53, no. 1, pp. 146-155, January 2004.
- [J270] X. Cai, S. Zhou, and G. B. Giannakis, "Group-Orthogonal Multi-Carrier CDMA," *IEEE Transactions on Communications*, vol. 52, no. 1, pp. 90-99, January 2004.
- [J271] S. Zhou, P. Xia, G. Leus, and G. B. Giannakis, "Chip-Interleaved Block-Spread CDMA versus DS-CDMA for Cellular Downlink: A comparative study," *IEEE Transactions on Wireless Communications*, vol. 3, no. 1, pp. 176-190, January 2004.
- [J272] P. Xia, S. Zhou, and G. B. Giannakis, "Adaptive MIMO OFDM based on Partial Channel State Information," *IEEE Transactions on Signal Processing*, vol. 52, no. 1, pp. 202-213, January 2004.
- [J273] L. Yang, and G. B. Giannakis, "Digital-Carrier Multi-Band User Codes for Baseband UWB Multiple Access," *Journal on Communications and Networks*, vol. 5, no. 4, pp. 374-385, December 2003.
- [J274] X. Luo, L. Yang, and G. B. Giannakis, "Designing Optimal Pulse-Shapers for Ultra-Wideband Radios," *Journal on Communications and Networks*, vol. 5, no. 4, pp. 344-353, December 2003.
- [J275] X. Cai, and G. B. Giannakis, "Benchmarking Performance and Suppressing Inter-Carrier Interference in Wireless Mobile OFDM," *IEEE Transactions on Communications*, vol. 51, no. 12, pp. 2047-2056, December 2003.

- [J276] P. Xia, S. Zhou, and G. B. Giannakis, "Bandwidth- and Power-Efficient Multi-Carrier Multiple Access," *IEEE Transactions on Communications*, vol. 51, no. 11, pp. 1828-1837, November 2003.
- [J277] X. Cai, and G. B. Giannakis, "Two-Dimensional Channel Simulation Models for Shadow Fading Processes," *IEEE Transactions on Vehicular Technology*, vol. 52, no. 6, pp. 1558-1567, November 2003.
- [J278] X. Ma, and G. B. Giannakis, "Full-Diversity Full-Rate Complex-Field Space-Time Coding," *IEEE Transactions on Signal Processing*, vol. 51, no. 11, pp. 2917-2930, November 2003.
- [J279] Z. Wang, and G. B. Giannakis, "A Simple and General Parameterization Quantifying Performance in Fading Channels," *IEEE Transactions on Communications*, vol. 51, no. 8, pp. 1389-1398, August 2003.
- [J280] G. Leus, S. Zhou, and G. B. Giannakis, "Orthogonal Multiple Access over Time- and Frequency-Selective Fading," *IEEE Transactions on Information Theory*, vol. 49, no. 8, pp. 1442-1450, August 2003.
- [J281] C. Tepedelenlioglu, A. Abdi, and G. B. Giannakis, "The Ricean K Factor: Estimation and Performance Analysis," *IEEE Transactions on Wireless Communications*, vol. 2, no. 4, pp. 799-810, July 2003.
- [J282] X. Ma and G. B. Giannakis, "Maximum-Diversity Transmissions over Doubly-Selective Wireless Channels," *IEEE Transactions on Information Theory*, vol. 49, no. 7, pp. 1832-1840, July 2003.
- [J283] S. Zhou, and G. B. Giannakis, "Optimal Transmitter Eigen-Beamforming and Space-Time Block Coding based on Channel Correlations," *IEEE Transactions on Information Theory*, vol. 49, no. 7, pp. 1673-1690, July 2003.
- [J284] X. Ma, G. B. Giannakis, and S. Ohno, "Optimal Training for Block Transmissions over Doubly-Selective Wireless Fading Channels," *IEEE Transactions on Signal Processing*, vol. 51, no. 5, pp. 1351-1366, May 2003.
- [J285] Z. Liu and G. B. Giannakis, "Block Differentially Encoded OFDM with Maximum Multipath Diversity," *IEEE Transactions on Wireless Communications*, vol. 2, no. 3, pp. 420-423, May 2003.
- [J286] Z. Liu, Y. Xin, and G. B. Giannakis, "Linear Constellation Precoding for OFDM with Maximum Multipath Diversity and Coding Gains," *IEEE Transactions on Communications*, vol. 51, no. 3, pp. 416-427, March 2003.
- [J287] * Y. Xin, Z. Wang, and G. B. Giannakis, "Space-Time Diversity Systems based on Linear Constellation Precoding," *IEEE Transactions on Wireless Communications*, vol. 2, no. 2, pp. 294-309, March 2003.
- * **Received the IEEE Communications Society's G. Marconi Prize Paper Award in 2004**
- [J288] Z. Wang and G. B. Giannakis, "Complex-Field Coding for OFDM over Fading Wireless Channels," *IEEE Transactions on Information Theory*, vol. 49, no. 3, pp. 707-720, March 2003.
- [J289] R. Wang, Z. Wang, and G. B. Giannakis, "Combining Galois with Complex Field Coding for Space-Time Communications," *European Telecommunications Transactions*, vol. 14, no. 1, pp. 25-36, Jan./Feb. 2003.

2002

- [J290] T. Jiang, N. Sidiropoulos, and G. B. Giannakis, "Kalman Filtering for Power Estimation in Mobile Communications," *IEEE Transactions on Wireless Communications*, vol. 2, no. 1, pp. 151-161, January 2003.
- [J291] S. Zhou and G. B. Giannakis, "Single-Carrier Space-Time Block Coded Transmissions over Frequency-Selective Fading Channels," *IEEE Transactions on Information Theory*, vol. 49, no. 1, pp. 164-179, January 2003.
- [J292] S. Ohno and G. B. Giannakis, "Optimal training and redundant precoding for block transmissions with application to wireless OFDM," *IEEE Transactions on Communications*, vol. 50, no. 12, pp. 2113-2123, December 2002.
- [J293] B. Muquet, Z. Wang, G. B. Giannakis, M. de Courville, and P. Duhamel, "Cyclic prefix or zero-padding for multi-carrier transmissions?" *IEEE Transactions on Communications*, vol. 50, no. 12, pp. 2136-2148, December 2002.
- [J294] L. Yang, and G. B. Giannakis, "Multi-Stage Block-Spreading for Impulse Radio Multiple Access through ISI channels," *IEEE Journal on Selected Areas in Communications*, vol. 20, no. 9, pp. 1767-1777, December 2002.
- [J295] X. Ma, and G. B. Giannakis, "Complex Field Coded MIMO Systems: Performance, Rate, and Trade-offs," *Wireless Communications and Mobile Computing*, pp. 693-717, November 2002.
- [J296] B. Muquet, P. Maniez, P. Duhamel, M. de Courville, and G. B. Giannakis, "Turbo-demodulation of zero-padded OFDM," *IEEE Transactions on Communications*, vol. 50, no. 11, pp. 1725-1728, November 2002.
- [J297] S. Ohno and G. B. Giannakis, "Average-Rate Optimal PSAM Transmissions over Time-Selective Fading Channels," *IEEE Transactions on Wireless Communications*, vol. 1, no. 4, pp. 712-720, October 2002.
- [J298] S. Zhou, and G. B. Giannakis, "Optimal Transmitter Eigen-Beamforming and Space-Time Block Coding based on Channel Mean Feedback," *IEEE Transactions on Signal Processing*, vol. 50, no. 10, pp. 2599-2613, Oct. 2002.
- [J299] Z. Liu, Y. Xin, and G. B. Giannakis, "Space-Time-Frequency Coded OFDM over Frequency-Selective Fading Channels," *IEEE Transactions on Signal Processing*, vol. 50, no. 10, pp. 2465-2476, October 2002.
- [J300] C. J. Le Martret and G. B. Giannakis, "All-Digital Impulse Radio for Wireless Cellular Systems," *IEEE Transactions on Communications*, vol. 50, no. 9, pp. 1440-1450, September 2002.
- [J301] P. Ciblat, P. Loubaton, E. Serpedin and G. B. Giannakis, "Asymptotic Analysis of Blind Cyclic Correlation Based Symbol Rate Estimators," *IEEE Transactions on Information Theory*, vol. 48, pp. 1922-1934, July 2002.
- [J302] Y. Xin, and G. B. Giannakis, "High-Rate Space-Time Layered OFDM," *IEEE Communications Letters*, vol. 6, no. 5, pp. 187-189, May 2002.

- [J303] S. Zhou, B. Muquet and G. B. Giannakis, "Subspace-based (Semi-) Blind Channel Estimation for Block Precoded Space-Time OFDM," *IEEE Transactions on Signal Processing*, vol. 50, pp. 1215-1228, May 2002.
- [J304] H. Li, X. Lu, and G. B. Giannakis, "Capon Multiuser Receiver for CDMA Systems with Space-Time Coding," *IEEE Transactions on Signal Processing*, vol. 50, pp. 1193-1204, May 2002.
- [J305] A. Scaglione, P. Stoica, S. Barbarossa, G. B. Giannakis, and H. Sampath, "Optimal designs for space-time linear precoders and equalizers," *IEEE Transactions on Signal Processing*, vol. 50, pp. 1051-1064, May 2002.
- [J306] S. Zhou, G. B. Giannakis, and A. Swami, "Digital multi-carrier spread-spectrum versus direct-sequence spread-spectrum for resistance to jamming and multipath," *IEEE Transactions on Communications*, vol. 50, no. 4, pp. 643-655, April 2002.
- [J307] S. Barbarossa, A. Scaglione, and G. B. Giannakis, "Performance Analysis of a Deterministic Channel Estimator for Block Transmission Systems with Null Guard Intervals," *IEEE Transactions on Signal Processing*, vol. 50, no. 3, pp. 684 -695, March 2002.
- [J308] A. Stamoulis and G. B. Giannakis, "Deterministic time-varying packet fair queueing for integrated services networks," *Journal of VLSI Signal Processing*, vol. 30, no. 1-3, pp. 71-87, March 2002.
- [J309] S. Barbarossa, M. Pompili, and G. B. Giannakis, "Channel-independent synchronization of orthogonal frequency division multiple access systems," *IEEE Journal on Selected Areas in Communications*, vol. 20, no. 2, pp. 474-486, February 2002.
- [J310] S. Zhou, G. B. Giannakis, and C. L. Martet, "Chip-Interleaved Block-Spread Code Division Multiple Access," *IEEE Transactions on Communications*, vol. 50, no. 2, pp. 235-248, February 2002.
- [J311] Z. Liu, X. Ma, and G. B. Giannakis, "Space-time coding and Kalman filtering for diversity transmissions through time-selective fading channels," *IEEE Transactions on Communications*, vol. 50, no. 2, pp. 183-186, February 2002.
- [J312] P. Ciblat, P. Loubaton, E. Serpedin, and G. B. Giannakis, "Performance of blind carrier-offset estimation for non-circular transmissions through frequency-selective channels," *IEEE Transactions on Signal Processing*, vol. 50, no. 1, pp. 130-140, January 2002.
- [J313] A. Stamoulis, Z. Liu, and G. B. Giannakis, "Space-time coded generalized multicarrier CDMA with block-spreading for multirate services," *IEEE Transactions on Signal Processing*, vol. 50, no. 1, pp. 119-129, January 2002.
- 2001**
- [J314] X. Ma, C. Tepedelenlioglu, G. B. Giannakis, and S. Barbarossa, "Non-data aided carrier-offset estimators for OFDM with null sub-carriers: Identifiability, algorithms, and performance," *IEEE Journal on Selected Areas in Communications*, vol. 19, no. 12, pp. 2504-2515, December 2001.
- [J315] Z. Wang and G. B. Giannakis, "Block-Precoding for MUI/ISI-Resilient Generalized Multi-Carrier CDMA with Multirate Capabilities," *IEEE Transactions on Communications*, vol. 49, no. 11, pp. 2016-2027, November 2001.

- [J316] S. Zhou and G. B. Giannakis, "Space-time coding with maximum diversity gains over frequency-selective fading channels," *IEEE Signal Processing Letters*, vol. 8, no. 10, pp. 269-272, October 2001.
- [J317] F. Gini, G. B. Giannakis, M. Greco, and G. T. Zhou, "Time-averaged subspace methods for radar clutter texture retrieval," *IEEE Transactions on Signal Processing*, vol. 49, no. 9, pp. 1886-1898, September 2001.
- [J318] Z. Liu, G. B. Giannakis, and B. L. Hughes, "Double Differential Space-Time Block Coding for Time-Varying Fading Channels," *IEEE Transactions on Communications*, vol. 49, no. 9, pp. 1529-1539, September 2001.
- [J319] S. Zhou and G. B. Giannakis, "Finite-Alphabet based Channel Estimation for OFDM and Related Multi-Carrier Systems," *IEEE Transactions on Communications*, vol. 49, no. 8, pp. 1402-1414, August 2001.
- [J320] E. G. Larsson, G. Liu, J. Li, and G. B. Giannakis, "Joint Symbol Timing and Channel Estimation for OFDM Based WLANs," *IEEE Communications Letters*, vol. 5, no. 8, pp. 325-327, August 2001.
- [J321] E. Serpedin, P. Ciblat, G. B. Giannakis, and P. Loubaton, "Performance Analysis of Blind Carrier Phase Estimators for General QAM Constellations," *IEEE Transactions on Signal Processing*, vol. 49, no. 8, pp. 1816-1823, August 2001.
- [J322] Z. Liu, G. B. Giannakis, S. Barbarossa, and A. Scaglione, "Transmit-Antennae Space-Time Block Coding for Generalized OFDM in the Presence of Unknown Multipath," *IEEE Journal on Selected Areas in Communications*, vol. 19, no. 7, pp. 1352-1364, July 2001.
- [J323] C. Tepedelenlioglu and G. B. Giannakis, "On Velocity Estimation and Correlation Properties of Narrow Band Communication Channels," *IEEE Transactions on Vehicular Technology*, vol. 50, no. 4, pp. 1039-1052, July 2001.
- [J324] Z. Liu and G. B. Giannakis, "Space-Time Block Coded Multiple Access Through Frequency-Selective Channels," *IEEE Transactions on Communications*, vol. 49, no. 6, pp. 1033-1044, June 2001.
- [J325] C. Tepedelenlioglu, A. Abdi, G. B. Giannakis, and M. Kaveh, "Estimation of Doppler Spread and Signal Strength in Mobile Communications with Applications to Handoff and Adaptive Transmission," *Wireless Communications and Mobile Computing*, vol. 1, no. 2, pp. 221-242, April-June 2001.
- [J326] S. Zhou, G. B. Giannakis, and A. Scaglione, "Long Codes for Generalized FH-OFDMA in Unknown Multipath," *IEEE Transactions on Communications*, vol. 49, pp. 721-733, April 2001.
- [J327] G. B. Giannakis and E. Serpedin, "A bibliography on nonlinear system identification and its applications in signal processing, communications and biomedical engineering," *Signal Processing - EURASIP*, vol. 81, pp. 533-580, March 2001.
- [J328] A. Abdi, C. Tepedelenlioglu, M. Kaveh, and G. B. Giannakis, "On the Estimation of the K-parameter for the Rice Fading Distribution," *IEEE Communication Letters*, vol. 5, pp. 92-94, March 2001.
- [J329] J. Li, G. Liu, and G. B. Giannakis, "Carrier Frequency Offset Estimation for OFDM based WLANs," *IEEE Signal Processing Letters*, vol. 8, pp. 80-82, March 2001.

2000

- [J330] Z. Liu, G. B. Giannakis, B. Muquet, and S. Zhou, “Space-Time Coding for Broadband Wireless Communications,” *Wireless Communications and Mobile Computing*, vol. 1, pp. 33–53, January 2001.
- [J331] A. Stamoulis, G. B. Giannakis, and A. Scaglione, “Block FIR Decision-Feedback Equalizers for Filterbank Precoded Transmissions with Blind Channel Estimation Capabilities,” *IEEE Transactions on Communications*, vol. 49, pp. 69–83, January 2001.
- [J332] G. B. Giannakis, Z. Wang, A. Scaglione, and S. Barbarossa, “AMOUR – Generalized Multicarrier Transceivers for Blind CDMA regardless of Multipath,” *IEEE Transactions on Communications*, vol. 48, pp. 2064–2076, December 2000.
- [J333] G. B. Giannakis, A. Stamoulis, Z. Wang, and P. Anghel, “Load-Adaptive MUI/ISI-Resilient Generalized Multi-Carrier with DF Receivers and Blind Estimation Capabilities,” *European Telecommunications Transactions*, vol. 11, pp. 527–537, November-December 2000.
- [J334] G. B. Giannakis and R. Heath, “Blind identification of multichannel FIR blurs and perfect image restoration,” *IEEE Transactions on Image Processing*, vol. 9, pp. 1877–1896, November 2000.
- [J335] E. Serpedin, A. Chevreuril, G. B. Giannakis, and P. Loubaton, “Blind channel and frequency-offset/Doppler estimation using periodic modulation precoders,” *IEEE Transactions on Signal Processing*, vol. 48, pp. 2389–2405, August 2000.
- [J336] ★ N. D. Sidiropoulos, R. Bro, and G. B. Giannakis, “Parallel Factor Analysis in Sensor Array Processing,” *IEEE Transactions on Signal Processing*, vol. 48, pp. 2377–2388, August 2000.
★ **Received the IEEE SPS Senior Best Paper Award in 2001**
- [J337] A. Scaglione, G. B. Giannakis, and S. Barbarossa, “Lagrange/Vandermonde MUI Eliminating User Codes for Quasi-Synchronous CDMA in Unknown Multipath,” *IEEE Transactions on Signal Processing*, vol. 48, pp. 2057–2073, July 2000.
- [J338] C. Tepedelenlioglu and G. B. Giannakis, “Transmitter Redundancy for Blind Estimation and Equalization of Time- and Frequency-Selective Channels,” *IEEE Transactions on Signal Processing*, vol. 48, pp. 2029–2043, July 2000.
- [J339] A. Chevreuril, E. Serpedin, P. Loubaton, and G. B. Giannakis, “Blind channel identification and equalization using non-redundant periodic modulation precoders: Performance analysis,” *IEEE Transactions on Signal Processing*, vol. 48, pp. 1570–1586, June 2000.
- [J340] G. B. Giannakis, “Signal Processing Advances in Wireless and Mobile Communications,” *IEEE Signal Processing Magazine*, vol. 17, pp. 14–15, May 2000.
- [J341] ★ Z. Wang and G. B. Giannakis, “Wireless Multicarrier Communications: Where Fourier Meets Shannon,” *IEEE Signal Processing Magazine*, vol. 17, pp. 29–48, May 2000.
★ **Received the IEEE SPS Magazine Best Paper Award in 2003**
- [J342] N. D. Sidiropoulos, G. B. Giannakis, and R. Bro, “Blind PARAFAC Receivers for DS-SS Systems,” *IEEE Transactions on Signal Processing*, vol. 48, pp. 810–823, March 2000.
- [J343] A. Scaglione, G. B. Giannakis, and S. Barbarossa, “Redundant Filterbank Precoders and Equalizers Part II: Blind Channel Estimation Synchronization, and Direct Equalization,” *IEEE Transactions on Signal Processing*, vol. 47, pp. 2007–2022, July 1999.

1999

[J344] ★ A. Scaglione, G. B. Giannakis, and S. Barbarossa, “Redundant Filterbank Precoders and Equalizers Part I: Unification and Optimal Designs,” *IEEE Transactions on Signal Processing*, vol. 47, pp. 1988–2006, July 1999.

★ **Received IEEE SPS Senior Best Paper Award in 2000**

[J345] O. Besson, G. B. Giannakis, and F. Gini, “Improved Estimation of Hyperbolic Frequency Modulated Chirp Signals,” *IEEE Transactions on Signal Processing*, vol. 47, pp. 1384–1388, May 1999.

[J346] A. S. S. Barbarossa and G. B. Giannakis, “Filterbank Transceivers Optimizing Information Rate in Block Transmissions over Dispersive Channels,” *IEEE Transactions on Information Theory*, vol. 45, pp. 1019–1032, April 1999.

[J347] G. B. Giannakis (Editor), “Highlights of Signal Processing for Communications,” *IEEE Signal Processing Magazine*, vol. 16, pp. 14–50, March 1999.

[J348] R. W. Heath and G. B. Giannakis, “Exploiting Input Cyclostationarity for Blind Channel Identification in OFDM Systems,” *IEEE Transactions on Signal Processing*, vol. 47, pp. 848–856, March 1999.

[J349] A. Scaglione and G. B. Giannakis, “Design of user codes in QS-CDMA systems for MUI elimination in unknown multipath,” *IEEE Communication Letters*, pp. 25–27, February 1999.

[J350] E. Serpedin and G. B. Giannakis, “A simple proof of a known blind channel identifiability result,” *IEEE Transactions on Signal Processing*, vol. 47, pp. 591–593, February 1999.

[J351] F. Gini and G. B. Giannakis, “Hybrid FM-polynomial phase signal modeling: estimation and performance analysis,” *IEEE Transactions on Signal Processing*, vol. 47, pp. 363–377, February 1999.

[J352] G. B. Giannakis and C. Tepedelenlioglu, “Direct blind equalizers of multiple FIR channels: A deterministic approach,” *IEEE Transactions on Signal Processing*, vol. 47, pp. 62–64, January 1999.

1998

[J353] G. B. Giannakis and E. Serpedin, “Blind Identification of ARMA Models with Periodically Modulated Inputs,” *IEEE Transactions on Signal Processing*, vol. 46, pp. 3099–3104, November 1998.

[J354] H. Liu and G. B. Giannakis, “Deterministic approaches for blind equalization of time-varying channels with antenna arrays,” *IEEE Transactions on Signal Processing*, vol. 46, pp. 3003–3013, November 1998.

[J355] F. Gini and G. B. Giannakis, “Generalized differential encoding: A nonlinear signal processing framework,” *IEEE Transactions on Signal Processing*, vol. 46, pp. 2967–2974, November 1998.

[J356] G. B. Giannakis and C. Tepedelenlioglu, “Basis Expansion Models and Diversity Techniques for Blind Equalization of Time-Varying Channels,” *Proceedings of the IEEE*, vol. 86, pp. 1969–1986, October 1998.

[J357] W. Chen, G. B. Giannakis, and N. Nandhakumar, “A harmonic retrieval framework for discontinuous motion estimation,” *IEEE Transactions on Image Processing*, vol. 7, pp. 1242–1257, September 1998.

[J358] G. B. Giannakis, “Channel Estimation and Equalization,” in *Highlights of Statistical Signal and Array Processing* (A. O. Hero, ed.), vol. 15, pp. 21–64, September 1998.

- [J359] E. Serpedin and G. B. Giannakis, “Blind channel identification and equalization using modulation induced cyclostationarity,” *IEEE Transactions on Signal Processing*, vol. 46, pp. 1930–1944, July 1998.
- [J360] T. J. Endres, S. D. Halford, C. R. Johnson Jr., and G. B. Giannakis, “Simulated comparisons of blind equalization algorithms for cold start-up applications,” *International Journal of Adaptive Control and Signal Processing*, vol. 12, pp. 283–301, May 1998.
- [J361] F. Gini and G. B. Giannakis, “Frequency Offset and Symbol Timing Recovery in Flat Fading Channels: A Cyclostationary Approach,” *IEEE Transactions on Communications*, vol. 46, pp. 400–411, March 1998.
- [J362] S. Barbarossa, A. Scaglione, and G. B. Giannakis, “Product high-order ambiguity function for multicomponent polynomial phase signal modeling,” *IEEE Transactions on Signal Processing*, vol. 46, pp. 691–708, March 1998.
- 1997**
- [J363] M. K. Tsatsanis and G. B. Giannakis, “Subspace methods for blind identification of time-varying FIR channels,” *IEEE Transactions on Signal Processing*, vol. 45, pp. 3084–3093, December 1997.
- [J364] S. Shamsunder and G. B. Giannakis, “Multichannel blind signal separation and reconstruction,” *IEEE Transactions on Speech and Audio Processing*, vol. 5, pp. 515–528, November 1997.
- [J365] G. B. Giannakis and S. Halford, “Blind fractionally-spaced equalization of noisy FIR channels: direct and adaptive solutions,” *IEEE Transactions on Signal Processing*, vol. 45, pp. 2277–2292, September 1997.
- [J366] A. Swami, G. B. Giannakis, and G. Zhou, “Bibliography on Higher-Order Statistics,” *Signal Processing*, vol. 60, pp. 65–126, July 1997.
- [J367] G. B. Giannakis and S. D. Halford, “Asymptotically Optimal Blind Fractionally-Spaced Channel Estimation and Performance Analysis,” *IEEE Transactions on Signal Processing*, vol. 45, pp. 1815–1830, July 1997.
- [J368] M. K. Tsatsanis and G. B. Giannakis, “Transmitter Induced Cyclostationarity for Blind Channel Equalization,” *IEEE Transactions on Signal Processing*, vol. 45, pp. 1785–1794, July 1997.
- [J369] G. B. Giannakis, “Filterbanks for blind channel identification and equalization,” *IEEE Signal Processing Letters*, vol. 4, pp. 184–187, June 1997.
- [J370] M. K. Tsatsanis and G. B. Giannakis, “Blind estimation of direct sequence spread spectrum signals in multipath,” *IEEE Transactions on Signal Processing*, vol. 45, pp. 1241–1252, May 1997.
- [J371] G. B. Giannakis and E. Serpedin, “Linear multichannel blind equalizers of nonlinear FIR Volterra channels,” *IEEE Transactions on Signal Processing*, vol. 45, pp. 67–81, January 1997.
- 1996**
- [J372] M. K. Tsatsanis and G. B. Giannakis, “Optimal linear receivers for DS-CDMA systems: a signal processing approach,” *IEEE Transactions on Signal Processing*, vol. 44, pp. 3044–3055, December 1996.
- [J373] W. Chen, G. B. Giannakis, and N. Nandhakumar, “Spatio-temporal approach for time-varying image motion estimation,” *IEEE Transactions on Image Processing*, vol. 10, pp. 1448–1461, October 1996.

- [J374] M. K. Tsatsanis, G. B. Giannakis, and G. Zhou, “Estimation and equalization of fading channels with random coefficients,” *Signal Processing*, EURASIP, vol. 53, no. 2/3, pp. 211–229, 1996.
- [J375] A. Swami and G. B. Giannakis, “Guest Editorial: Higher-Order Statistics,” *Signal Processing*, EURASIP, vol. 53, pp. 89–91, 1996.
- [J376] T. E. Hall and G. B. Giannakis, “Image modeling using inverse filtering criteria with application to texture classification,” *IEEE Transactions on Signal Processing*, vol. 5, pp. 938–949, June 1996.
- [J377] G. Zhou and G. B. Giannakis, “Polyspectral analysis of mixed processes and coupled harmonics,” *IEEE Transactions on Information Theory*, vol. 42, pp. 943–958, May 1996.
- [J378] M. K. Tsatsanis and G. B. Giannakis, “Equalization of rapidly fading channels: Self recovering methods,” *IEEE Transactions on Communications*, vol. 44, pp. 619–630, May 1996.
- [J379] G. Zhou, G. B. Giannakis, and A. Swami, “On polynomial phase signals with time-varying amplitudes,” *IEEE Transactions on Signal Processing*, vol. 44, pp. 848 – 861, April 1996.
- [J380] A. Delopoulos and G. B. Giannakis, “Cumulant based identification of noisy closed loop systems,” *International Journal of Adaptive Control and Signal Processing*, vol. 10, pp. 303 – 317, March 1996.
- [J381] M. K. Tsatsanis and G. B. Giannakis, “Modeling and equalization of rapidly fading channels,” *International Journal of Adaptive Control and Signal Processing*, vol. 10, pp. 159–176, March 1996.
- [J382] A. V. Dandawate and G. B. Giannakis, “Modeling (almost) periodic moving average processes using cyclic statistics,” *IEEE Transactions on Signal Processing*, vol. 44, pp. 673–684, March 1996.
- [J383] J. M.-M. Anderson and G. B. Giannakis, “Noisy input output system identification using cumulants and the Steiglitz-McBride algorithm,” *IEEE Transactions on Signal Processing*, vol. 44, pp. 1021–1024, February 1996.
- 1995**
- [J384] G. B. Giannakis and A. Delopoulos, “Cumulant based autocorrelation estimates of non-Gaussian linear processes,” *IEEE Transactions on Signal Processing*, vol. 47, pp. 1–17, November 1995.
- [J385] J. M.-M. Anderson and G. B. Giannakis, “2-D harmonic retrieval using higher-order statistics,” *Multidimensional Systems and Signal Processing*, vol. 6, pp. 313–331, October 1995.
- [J386] G. B. Giannakis and G. Zhou, “Harmonics in multiplicative and additive noise: parameter estimation using cyclic statistics,” *IEEE Transactions on Signal Processing*, vol. 43, pp. 2217–2221, September 1995.
- [J387] J. M.-M. Anderson, G. B. Giannakis, and A. Swami, “Harmonic retrieval using higher-order statistics: a deterministic formulation,” *IEEE Transactions on Signal Processing*, vol. 43, pp. 1880–1889, August 1995.
- [J388] ★ M. K. Tsatsanis and G. B. Giannakis, “Principal component filter banks for optimal multiresolution analysis,” *IEEE Transactions on Signal Processing*, vol. 43, pp. 1766–1777, August 1995.
- ★ **Co-author M. K. Tsatsanis received IEEE SPS Young Author Best Paper Award in 1998**
- [J389] B. Sadler, G. B. Giannakis, and S. Shamsunder, “Noise subspace techniques in non-Gaussian noise using cumulants,” *IEEE Transactions on Aerospace and Electronic Systems*, vol. 31, pp. 1009–1018, July 1995.

- [J390] T. E. Hall and G. B. Giannakis, "Bispectral analysis and model validation of texture images," *IEEE Transactions on Image Processing*, vol. 4, pp. 996–1009, July 1995.
- [J391] G. Zhou and G. B. Giannakis, "Harmonics in multiplicative and additive noise: performance analysis of cyclic estimators," *IEEE Transactions on Signal Processing*, vol. 43, pp. 1445–1460, June 1995.
- [J392] G. Zhou and G. B. Giannakis, "Harmonics in multiplicative and additive noise: Cramer Rao bounds," *IEEE Transactions on Signal Processing*, vol. 43, pp. 1217–1231, May 1995.
- [J393] G. Zhou and G. B. Giannakis, "Retrieval of self coupled harmonics," *IEEE Transactions on Signal Processing*, vol. 43, pp. 1173–1186, May 1995.
- [J394] G. B. Giannakis, "Polyspectral and cyclostationary approaches for identification of closed loop systems," *IEEE Transactions on Automatic Control*, vol. 40, pp. 882–885, May 1995.
- [J395] J. M.-M. Anderson and G. B. Giannakis, "Noise insensitive image motion estimation using cumulants," *IEEE Transactions on Image Processing*, vol. 4, pp. 346–357, March 1995.
- [J396] S. Shamsunder, G. B. Giannakis, and B. Friedlander, "Estimating random amplitude polynomial phase signals: A cyclostationary approach," *IEEE Transactions on Signal Processing*, vol. 43, pp. 492–505, February 1995.
- [J397] A. V. Dandawate and G. B. Giannakis, "Asymptotic theory of mixed time averages and kth-order cyclic moment and cumulant statistics," *IEEE Transactions on Information Theory*, vol. 41, pp. 216–232, January 1995.
- 1994**
- [J398] G. B. Giannakis and M. Tsatsanis, "Time-domain tests for Gaussianity and time-reversibility," *IEEE Transactions on Signal Processing*, vol. 42, pp. 3460–3472, December 1994.
- [J399] G. Zhou and G. B. Giannakis, "On estimating random amplitude modulated harmonics using higher-order spectra," *IEEE Journal of Oceanic Engineering*, vol. 19, pp. 529–539, October 1994.
- [J400] S. Shamsunder and G. B. Giannakis, "Signal selective localization of non-Gaussian cyclostationary sources," *IEEE Transactions on Signal Processing*, vol. 42, pp. 2860–2863, October 1994.
- [J401] B. Sadler, G. B. Giannakis, and K.-S. Lii, "Estimation and detection in the presence of non-Gaussian noise," *IEEE Transactions on Signal Processing*, vol. 42, pp. 2729–2741, October 1994.
- [J402] G. B. Giannakis and G. Zhou, "Parameter estimation of cyclostationary amplitude modulated time series with application to missing observations," *IEEE Transactions on Signal Processing*, vol. 42, pp. 2408–2419, September 1994.
- [J403] A. V. Dandawate and G. B. Giannakis, "Statistical tests for presence of cyclostationarity," *IEEE Transactions on Signal Processing*, vol. 42, pp. 2355–2369, September 1994.
- [J404] A. Delopoulos and G. B. Giannakis, "Consistent identification of stochastic linear systems with noisy input output data," *Automatica*, vol. 30, pp. 1271–1294, August 1994.
- [J405] S. Shamsunder and G. B. Giannakis, "Detection and estimation of non-Gaussian sources using higher-order statistics," *IEEE Transactions on Signal Processing*, vol. 42, pp. 1145–1155, May 1994.

- [J406] A. Swami, G. B. Giannakis, and S. Shamsunder, "Multichannel ARMA processes," *IEEE Transactions on Signal Processing*, vol. 42, pp. 898–913, April 1994.
- [J407] G. Zhou and G. B. Giannakis, "On statistical models for classification and synthesis of textures," *Optical Engineering*, vol. 33, pp. 556–565, February 1994.
- [J408] A. Dandawate and G. B. Giannakis, "Nonparametric polyspectral estimators for kth-order (almost) cyclostationary processes," *IEEE Transactions on Information Theory*, vol. 40, pp. 67–84, January 1994.
- 1993**
- [J409] A. V. Dandawate and G. B. Giannakis, "Differential delay-doppler estimation using second and higher-order ambiguity functions," *IEE Proceedings - Part F, Radar and Signal Processing*, vol. 140, pp. 410–418, December 1993.
- [J410] M. K. Tsatsanis and G. B. Giannakis, "Time-varying system identification and model validation using wavelets," *IEEE Transactions on Signal Processing*, vol. 41, pp. 3512–3523, December 1993.
- [J411] A. V. Dandawate and G. B. Giannakis, "Non-parametric cyclic polyspectral analysis of amplitude modulated signals and processes with missing observations," *IEEE Transactions on Information Theory*, vol. 39, pp. 1864–1876, November 1993.
- [J412] S. Shamsunder and G. B. Giannakis, "Modeling of non-Gaussian array data using cumulants : DOA estimation of more sources with less sensors," *Signal Processing*, vol. 30, pp. 279–297, February 1993.
- 1992**
- [J413] B. Sadler, G. B. Giannakis, and D. J. Smith, "Acousto-optic estimation of correlations and spectra using triple correlations and bispectra," *Optical Engineering*, vol. 31, pp. 2139–2147, October 1992.
- [J414] A. Delopoulos and G. B. Giannakis, "Strongly consistent identification algorithms and noise insensitive mse criteria," *IEEE Transactions on Signal Processing*, vol. 40, pp. 1955–1970, Aug. 1992.
- [J415] M. K. Tsatsanis and G. B. Giannakis, "Object and texture classification using higher-order statistics," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 14, pp. 733–750, July 1992.
- [J416] G. B. Giannakis and A. Swami, "Identifiability of general ARMA processes using linear cumulant-based estimators," *Automatica*, vol. 38, pp. 771–779, July 1992.
- [J417] G. B. Giannakis and A. Swami, "Authors' reply to 'counterexamples to: on estimating non-causal non-minimum phase ARMA models of non-Gaussian processes,'" *IEEE Transactions on Signal Processing*, vol. 40, pp. 1013–1015, April 1992.
- [J418] G. B. Giannakis and M. K. Tsatsanis, "A unifying maximum-likelihood view of cumulant and polyspectral measures for non-Gaussian signal classification and estimation," *IEEE Transactions on Information Theory*, vol. 38, pp. 386–406, March 1992.
- [J419] B. Sadler and G. B. Giannakis, "Shift and rotation invariant object reconstruction using the bispectrum," *Journal of the Optical Society of America A*, vol. 9, pp. 57–69, January 1992.
- 1991**
- [J420] G. B. Giannakis and A. Dandawate, "Higher-order statistics based input/output system identification and application to noise cancellation," *Circuits, Systems, and Signal Processing*, vol. 10, pp. 485–511, October 1991.

- [J421] M. Rangoussi and G. B. Giannakis, “FIR modeling using log-bispectra: Weighted least-squares algorithms and performance analysis,” *IEEE Transactions on Circuits and Systems*, vol. 38, pp. 281–296, March 1991.
- [J422] G. B. Giannakis, “Signal reconstruction from multiple correlations: Frequency- and time-domain approaches: Author’s reply,” *Journal of the Optical Society of America A,(Communication)*, vol. 8, pp. 454–455, February 1991.
- 1990**
- [J423] G. B. Giannakis and J. Mendel, “Cumulant based order determination of non-Gaussian ARMA models,” *IEEE Transactions on Acoustics Speech and Signal Processing*, vol. 38, pp. 1411–1423, August 1990.
- [J424] G. B. Giannakis and M. K. Tsatsanis, “Signal detection and classification using matched filtering and higher-order statistics,” *IEEE Transactions on Acoustics Speech and Signal Processing*, vol. 38, pp. 1284–1296, July 1990.
- [J425] G. B. Giannakis and A. Swami, “On estimating non-causal non-minimum phase ARMA models of non Gaussian processes,” *IEEE Transactions on Acoustics Speech and Signal Processing*, vol. 38, pp. 478–495, March 1990.
- [J426] A. Swami, G. B. Giannakis, and J. M. Mendel, “Linear modeling of multidimensional non-Gaussian processes using cumulants,” *Multidimensional Systems and Signal Processing*, vol. 1, pp. 11–37, March 1990.
- [J427] G. B. Giannakis, “On the identifiability of non-Gaussian ARMA models using cumulants,” *IEEE Transactions on Automatic Control*, vol. 35, pp. 18–26, January 1990.
- 1989**
- [J428] G. B. Giannakis, “Wavelet parameter and phase estimation using cumulant slices,” *IEEE Transactions on Geoscience and Remote Sensing*, vol. 27, pp. 452–455, July 1989.
- [J429] G. B. Giannakis, Y. Inouye, and J. Mendel, “Cumulant based identification of multichannel moving-average models,” *IEEE Transactions on Automatic Control*, vol. 34, pp. 783–787, July 1989.
- [J430] G. B. Giannakis, “Signal reconstruction from multiple correlations: Frequency- and time-domain approaches,” *Journal of the Optical Society of America A*, vol. 6, pp. 682–697, May 1989.
- [J431] G. B. Giannakis, J. M. Mendel, and X. F. Zhao, “A fast maximum-likelihood detector for estimating sparse spike sequences,” *IEEE Transactions on Geoscience and Remote Sensing*, vol. 27, pp. 344–351, May 1989.
- [J432] * G. B. Giannakis and J. M. Mendel, “Identification of non-minimum phase systems using higher-order statistics,” *IEEE Transactions on Acoustics Speech and Signal Processing*, vol. 37, pp. 360–377, March 1989.
- 1987**
- * **Received IEEE SPS Young Author Best Paper Award in 1992**
- [J433] G. B. Giannakis and J. M. Mendel., “Entropy interpretation of maximum likelihood deconvolution,” *Geophysics*, vol. 52, pp. 1621–1630, December 1987.
- [J434] G. B. Giannakis, “Cumulants: A powerful tool in signal processing,” *Proceedings of the IEEE (Letters)*, September 1987.

2018 **Conference Papers**

- [C1] D. K. Berberidis, A. Nikolakopoulos, and G. B. Giannakis, “AdaDIF: Adaptive Diffusions for Efficient Semi-supervised Learning over Graphs,” *Proc. of IEEE Intl. Conf. on Big Data*, Seattle, Washington, Dec. 10-13, 2018.
- [C2] T. Chen, G. B. Giannakis, W. Yin, “LAG: Lazily Aggregated Gradient for Communication-Efficient Distributed Learning,” *Proc. of NIPS*, Montreal, Canada, December 3-8, 2018.
- [C3] M. Ma, J. Ren, G. B. Giannakis, and J. D. Haupt, “Fast Asynchronous Decentralized Optimization Allowing for Multiple Masters,” *Proc. of Globasp*, Anaheim, CA, USA, Nov. 26-28, 2018.
- [C4] V. N. Ioannidis, A. S. Zamzam, G. B. Giannakis, and N. D. Sidiropoulos, “Coupled Graph Tensor Factorization with Misses,” *Proc. of Globasp*, Anaheim, CA, USA, Nov. 26-28, 2018.
- [C5] L. Zhang, G. Wang, and G. B. Giannakis, “Real-time Power System State Estimation via Deep Unrolled Neural Networks,” *Proc. of Globasp*, Anaheim, CA, USA, Nov. 26-28, 2018.
- [C6] E. Ceci, Y. Shen, G. B. Giannakis, and S. Barbarossa, “Signal and Graph Perturbations via Total Least Squares,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, October 28-31, 2018.
- [C7] J. Chen, G. Wang, and G. B. Giannakis, “Nonlinear Discriminative Dimensionality Reduction of Multiple Datasets,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, October 28-31, 2018.
- [C8] M. Ma and G. B. Giannakis, “Hierarchical Consensus ADMM for Decentralized Learning,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, October 28-31, 2018.
- [C9] B. Li, T. Chen, and G. B. Giannakis, “Secure Edge Computing in IoT via Online Learning,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, October 28-31, 2018.
- [C10] P. A. Traganitis and G. B. Giannakis, “Blind Multi-class Ensemble Learning with Dependent Classifiers,” *Proc. of EUSIPCO*, Rome, Italy, Sept. 3-7, 2018.
- [C11] L. Zhang, G. Wang, and G. B. Giannakis, “Sparse Phase Retrieval via Iteratively Reweighted Amplitude Flow,” *Proc. of EUSIPCO*, Rome, Italy, Sept. 3-7, 2018.
- [C12] ★ D. K. Berberidis, A. Nikolakopoulos, and G. B. Giannakis, “Adaptive Diffusions for Scalable Learning over Graphs,” *Proc. of KDD, Intl. Workshop on Mining and Learning with Graphs*, London, August 19-23, 2018.
- ★ **Received the Best Paper Award.**
- [C13] T. Chen, N. Li, and G. B. Giannakis, “Aggregating Flexibility of Heterogeneous Energy Resources in Distribution Networks,” *Proc. of American Control Conference*, Milwaukee, WI, June 27-29, 2018.
- [C14] J. Chen, G. Wang, Y. Shen, and G. B. Giannakis, “Canonical Correlation Analysis with Common Graph Priors,” *Proc. of Statistical Signal Processing Workshop*, Freiburg, Germany, June 10-13, 2018.

- [C15] Y. Shen and G. B. Giannakis, “Online nonlinear sparse structural vector AR models for identifying dynamic graph topologies,” *Proc. of Data Science Workshop*, Lausanne, Switzerland, June 4-6, 2018.
- [C16] V. N. Ioannidis, Y. Shen, and G. B. Giannakis, “Semi-Blind Inference of Topologies and Signals over Graphs,” *Proc. of Data Science Workshop*, Lausanne, Switzerland, June 4-6, 2018.
- [C17] V. N. Ioannidis, Y. Shen, P. A. Traganitis, and G. B. Giannakis, “Kernel-based learning of processes over multi-layer graphs,” *Proc. of SPAWC*, Kalamata, Greece, June 25-28, 2018.
- [C18] A. Sadeghi, F. Sheikholeslami, and G. B. Giannakis, “Optimal Dynamic Caching via Reinforcement Learning,” *Proc. of SPAWC*, Kalamata, Greece, June 25-28, 2018.
- [C19] M. Ma, A. Nikolakopoulos, and G. B. Giannakis, “Fast Decentralized Learning with Hybrid ADMM,” *Proc. of Intl. Conf. on Acoustics, Speech, and Signal Processing*, Calgary, Canada, April 15-20, 2018.
- [C20] T. Chen and G. B. Giannakis, “Harnessing Bandit Online Learning for Low-Latency Fog Computing,” *Proc. of Intl. Conf. on Acoustics, Speech, and Signal Processing*, Calgary, Canada, April 15-20, 2018.
- [C21] Y. Shen, T. Chen, and G. B. Giannakis, “Online Multi-Kernel Learning with Orthogonal Random Features,” *Proc. of Intl. Conf. on Acoustics, Speech, and Signal Processing*, Calgary, Canada, April 15-20, 2018.
- [C22] L. Zhang, G. V. Karanikolas, M. Akcakaya, and G. B. Giannakis, “Fully Automatic Segmentation of the Right Ventricle via Multi-task Deep Neural Networks,” *Proc. of Intl. Conf. on Acoustics, Speech, and Signal Processing*, Calgary, Canada, April 15-20, 2018.
- [C23] G. Wang, J. Chen, and G. B. Giannakis, “DPCA: Dimensionality Reduction for Discriminative Analytics of Multiple Large-Scale Datasets,” *Proc. of Intl. Conf. on Acoustics, Speech, and Signal Processing*, Calgary, Canada, April 15-20, 2018.
- [C24] D. Lee, D. K. Berberidis, and G. B. Giannakis, “Adaptive Bayesian Channel Gain Cartography,” *Proc. of Intl. Conf. on Acoustics, Speech, and Signal Processing*, Calgary, Canada, April 15-20, 2018.
- [C25] D. K. Berberidis, A. Nikolakopoulos, and G. B. Giannakis, “Robust Random Walks for Efficient Graph-based Classification,” *Proc. of Intl. Conf. on Acoustics, Speech, and Signal Processing*, Calgary, Canada, April 15-20, 2018.
- [C26] A. Sadeghi, F. Sheikholeslami, A. G. Marques, and G. B. Giannakis, “Reinforcement Learning for 5G Caching with Dynamic Cost,” *Proc. of Intl. Conf. on Acoustics, Speech, and Signal Processing*, Calgary, Canada, April 15-20, 2018.
- [C27] Y. Shen, T. Chen, and G. B. Giannakis, “Online Ensemble Multi-kernel Learning Adaptive to Non-stationary and Adversarial Environments,” *Proc. of 21st Intl. Conf. on Artificial Intelligence and Statistics*, Lanzarote, Canary Islands, April 9-11, 2018.
- [C28] F. Sheikholeslami and G. B. Giannakis, “Robust Overlapping Community Detection via Constrained Egonet Tensor Decomposition,” *Proc. of 11th ACM Intl. Conf. on Web Search and Data Mining*, Los Angeles, Feb. 5-9, 2018.

2017

- [C29] X. Chen, W. Ni, T. Chen, I. B. Collins, X. Wang, R.-P. Liu, and G. B. Giannakis, “Distributed Stochastic Optimization of Network Function Virtualization,” *Proc. of Globecom Conf.*, Singapore, Dec. 4-8, 2017.
- [C30] P. A. Traganitis and G. B. Giannakis, “Distributed Sketched Subspace Clustering for Large-Scale Data,” *Proc. of CAMSAP Conf.*, Curacao, Dutch Antilles, Dec. 10-13, 2017.
- [C31] L. Zhang, G. Wang, and G. B. Giannakis, “Going Beyond Linear Dependencies to Unveil Connectivity of Meshed Grids,” *Proc. of CAMSAP*, Curacao, Dutch Antilles, Dec. 10-13, 2017.
- [C32] Y. Shen, P. A. Traganitis, and G. B. Giannakis, “Nonlinear Dimensionality Reduction on Graphs,” *Proc. of CAMSAP Conf.*, Curacao, Dutch Antilles, Dec. 10-13, 2017.
- [C33] F. Sheikholeslami, D. K. Berberidis, and G. B. Giannakis, “Scalable Low-Rank Nonlinear Subspace Tracking,” *Proc. of CAMSAP Conf.*, Curacao, Dutch Antilles, Dec. 10-13, 2017.
- [C34] F. Sheikholeslami and G. B. Giannakis, “Overlapping Community Detection via Constrained PARAFAC: A Divide and Conquer Approach,” *Proc. of Intl. Conf. on Data Mining*, New Orleans, USA, Nov. 18-21, 2017.
- [C35] P. A. Traganitis, A. Pages-Zamore, and G. B. Giannakis, “Multi-class Unsupervised Ensemble Classification via Joint Matrix Factorization,” *Proc. of Globasip Conf.*, Montreal, Canada, Nov. 14-16, 2017.
- [C36] V. N. Ioannidis, A. Nikolakopoulos, and G. B. Giannakis, “Semi-Parametric Kernel-based Reconstruction,” *Proc. of Globasip Conf.*, Montreal, Canada, Nov. 14-16, 2017.
- [C37] B. Li, T. Chen, X. Wang, and G. B. Giannakis, “Real-Time Energy Management with Improved Cost-Capacity Tradeoff,” *Proc. of Globasip Conf.*, Montreal, Canada, Nov. 14-16, 2017.
- [C38] D. K. Berberidis and G. B. Giannakis, “Active Sampling for Graph-Aware Classification,” *Proc. of Globasip Conf.*, Montreal, Canada, Nov. 14-16, 2017.
- [C39] G. V. Karanikolas, O. Sporns, and G. B. Giannakis, “Multi-kernel Change Detection for Dynamic Functional Connectivity Graphs,” *Proc. of Asilomar Conf.*, Pacific Grove, CA, Oct. 29 - Nov. 1, 2017.
- [C40] F. Sheikholeslami and G. B. Giannakis, “Soft Unveiling of Communities via Egonet Tensors,” *Proc. of Asilomar Conf.*, Pacific Grove, CA, Oct. 29 - Nov. 1, 2017.
- [C41] Y. Shen, X. Fu, G. B. Giannakis, and N. D. Sidiropoulos, “Inferring Directed Network Topologies via Joint Diagonalization,” *Proc. of Asilomar Conf.*, Pacific Grove, CA, Oct. 29 - Nov. 1, 2017.
- [C42] T. Chen, Y. Shen, and G. B. Giannakis, “Online Learning for ?Thing-Adaptive? Fog Computing in IoT,” *Proc. of Asilomar Conf.*, Pacific Grove, CA, Oct. 29 - Nov. 1, 2017.
- [C43] F. Sheikholeslami and G. B. Giannakis, “Scalable Kernel-based Learning via Low-rank Approximation of Lifted Data,” *Proc. of 55th Allerton Conf. on Comm., Control, and Computing*, Oct. 4-6, 2017.

- [C44] A. Sadeghi, S. Ghavami, and G. B. Giannakis, “Performance Bounds of Estimators in Molecular Communications under Structural Constraints,” *Proc. of 4th ACM Intl. Conf. on Nanoscale Computing and Communication*, Washington, DC, Sept. 27-29, 2017.
- [C45] P. A. Traganitis, Y. Shen, and G. B. Giannakis, “Network Topology Inference via Elastic Net SEMs,” *Proc. of EUSIPCO*, Kos Island, Greece, Aug. 28 - Sept. 3, 2017.
- [C46] ★ G. Wang, G. B. Giannakis, and J. Chen, “Solving Large-scale Systems of Random Quadratic Equations via Stochastic Truncated Amplitude Flow,” *Proc. of EUSIPCO*, Kos Island, Greece, Aug. 28 - Sept. 3, 2017.
- ★ **Received the Best Student Paper Award.**
- [C47] T. Chen, Q. Ling, and G. B. Giannakis, “Online Convex Optimization for Dynamic Network Resource Allocation,” *Proc. of EUSIPCO*, Kos Island, Greece, Aug. 28 - Sept. 3, 2017.
- [C48] V. N. Ioannidis, D. Romero, and G. B. Giannakis, “Inference of Spatiotemporal Processes over Dynamic Graphs via Kernel Krigeed Kalman Filters,” *Proc. of EUSIPCO*, Kos Island, Greece, Aug. 28 - Sept. 3, 2017.
- [C49] P. A. Traganitis, Y. Shen, and G. B. Giannakis, “Topology Inference for Multilayer Networks,” *Proc. of Intl. Workshop on Network Science for Comms.*, May 2017.
- [C50] Z. Wang, Z. Yu, Q. Ling, D. K. Berberidis, and G. B. Giannakis, “Distributed Recursive Least-Squares with Data-Adaptive Censoring,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, New Orleans, USA, March 5-9, 2017.
- [C51] Y. Shen, B. Baingana, and G. B. Giannakis, “Topology Inference of Directed Graphs using Nonlinear Structural Vector Autoregressive Models,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, New Orleans, USA, March 5-9, 2017 (invited).
- [C52] G. Wang, G. B. Giannakis, J. Chen, and M. Akcakaya, “SPARTA: Sparse Phase Retrieval via Truncated Amplitude Flow,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, New Orleans, USA, March 5-9, 2017.
- [C53] G. V. Karanikolas and G. B. Giannakis, “Identifying Directional Connections in Brain Networks via Multi-kernel Granger Models,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, New Orleans, USA, March 5-9, 2017 (invited).
- [C54] A. Pages-Zamore, G. B. Giannakis, R. Lopez-Valcarce, and P. Gimenez-Febrer, “Robust Clustering of Data Collected via Crowdsourcing,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, New Orleans, USA, March 5-9, 2017.
- [C55] L. Zhang, V. Kekatos, and G. B. Giannakis, “A Generalized Frank-Wolfe Approach to Decentralized Control of Vehicle Charging,” *Proc. of Conf. on Decision and Control*, Las Vegas, Dec. 12-14, 2016.
- [C56] G. Wang and G. B. Giannakis, “Solving Random Systems of Quadratic Equations via Truncated Generalized Gradient Flow,” *Proc. of Neural Information Processing Systems*, Barcelona, Spain, Dec. 5-10, 2016.
- [C57] T. Chen, A. Mokhtari, X. Wang, A. Ribeiro, and G. B. Giannakis, “A Data-driven Approach to Stochastic Network Optimization,” *Proc. of Globalsip*, Washington, DC, Dec. 7-9, 2016.

- [C58] P. A. Traganitis and G. B. Giannakis, "PARAFAC-based Multilinear Subspace Clustering for Tensor Data," *Proc. of Globalsip*, Washington, DC, Dec. 7-9, 2016.
- [C59] F. Sheikholeslami, B. Baingana, G. B. Giannakis, and N. D. Sidiropoulos, "Egonet tensor decomposition for community identification," *Proc. of Globalsip*, Washington, DC, Dec. 7-9, 2016.
- [C60] Y. Shen, B. Baingana, and G. B. Giannakis, "Tracking dynamic piecewise-constant network topologies via adaptive tensor factorization," *Proc. of Globalsip*, Washington, DC, Dec. 7-9, 2016.
- [C61] G. Wang, A. S. Zamzam, G. B. Giannakis, and N. D. Sidiropoulos, "Power System State Estimation via Feasible Point Pursuit," *Proc. Globalsip Conf.*, Washington, DC, Dec. 7-9, 2016.
- [C62] D. Romero, D. Lee, and G. B. Giannakis, "Blind Channel Gain Cartography," *Proc. of Globalsip Conf.*, Washington, DC, Dec. 7-9, 2016.
- [C63] X. Chen, T. Chen, X. Wang, L. Huang, and G. B. Giannakis, "Two-Scale Stochastic Control for Smart-Grid Powered Coordinated Multi-Point Systems," *Proc. of Globecom Conf.*, Washington, DC, Dec. 4-8, 2016.
- [C64] Y. Shen, B. Baingana, and G. B. Giannakis, "Inferring Directed Network Topologies via Tensor Factorization," *Proc. of Asilomar Conf.*, Pacific Grove, CA, Nov. 6-9, 2016.
- [C65] V. N. Ioannidis, D. Romero, and G. B. Giannakis, "Semiparametric Reconstruction of Signals over Graphs," *Proc. of Asilomar Conf.*, Pacific Grove, CA, Nov. 6-9, 2016.
- [C66] T. Chen, A. G. Marques, and G. B. Giannakis, "Space-Time Scheduling For Green Data Center Networks," *Proc. of Asilomar Conf.*, Pacific Grove, CA, Nov. 6-9, 2016.
- [C67] P. A. Traganitis and G. B. Giannakis, "Randomized Approaches to Large-Scale Subspace Clustering," *Proc. of Asilomar Conf.*, Pacific Grove, CA, Nov. 6-9, 2016.
- [C68] Y. Shen, and G. B. Giannakis, "Online Dictionary Learning for Binary Data," *Proc. of EUSIPCO*, Budapest, Hungary, Aug. 29-Sept. 2, 2016.
- [C69] D. Romero, M. Ma, and G. B. Giannakis, "Estimating Signals over Graphs via Multi-kernel Learning," *Proc. of IEEE Wrkshp. on Statistical Signal Processing*, Palma de Mallorca, June 26-28, 2016.
- [C70] L. Zhang, D. Romero, and G. B. Giannakis, "Fast Algorithms for Learning Linear Combinations of Kernels," *Proc. of IEEE Wrkshp. on Statistical Signal Processing*, Palma de Mallorca, June 26-28, 2016.
- [C71] D. Romero, D. K. Berberidis, and G. B. Giannakis, "Quickest Convergence of Online Algorithms via Data Selection," *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Shanghai, China, March 20-25, 2016.
- [C72] M. Zamanighomi, Z. Wang, and G. B. Giannakis, "Estimating High-Dimensional Covariance Matrices with Misses for Kronecker Product Expansion Models," *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Shanghai, China, March 20-25, 2016.
- [C73] G. V. Karanikolas, G. B. Giannakis, K. Slavakis, and R. M. Leahy, "Multi-Kernel Based Nonlinear Models for Connectivity Identification of Brain Networks," *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Shanghai, China, March 20-25, 2016.

2015

- [C74] D. K. Berberidis and G. B. Giannakis, “Data Sketching for Large-Scale Kalman Filtering,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Shanghai, China, March 20-25, 2016.
- [C75] X. Chen, T. Chen, X. Wang, and G. B. Giannakis, “Stochastic Online Control of Smart-Grid Powered MIMO Downlink Transmissions,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Shanghai, China, March 20-25, 2016.
- [C76] T. Chen, Y. Zhang, X. Wang, and G. B. Giannakis, “Robust Geographical Load Balancing for Sustainable Data Centers,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Shanghai, China, March 20-25, 2016.
- [C77] Y. Shen, B. Baingana, and G. B. Giannakis, “Nonlinear Structural Equation Models for Network Topology Inference,” *Proc. of Conf. on Information Sciences and Systems*, Princeton, NJ, March 16-18, 2016.
- [C78] P. Traganitis and G. B. Giannakis, “Efficient Subspace Clustering of Large-scale Data Streams with Misses,” *Proc. of Conf. on Information Sciences and Systems*, Princeton, NJ, March 16-18, 2016.
- [C79] M. Mardani and G. B. Giannakis, “Tensor Subspace Learning from Partial Linear Measurements,” *Proc. of Workshop on Tensor Decompositions and Applications*, Leuven, Belgium, January 18-23, 2016.
- [C80] L. M. Lopez-Ramos, V. Kekatos, A. G. Marques, and G. B. Giannakis, “Microgrid Dispatch and Price of Reliability Using Stochastic Approximation,” *Proc. of Globasip Conf.*, Orlando, FL, Dec. 14-16, 2015.
- [C81] F. Sheikholeslami, D. K. Berberidis, and G. B. Giannakis, “Kernel-based Low-rank Feature Extraction on a Budget for Big Data Streams,” *Proc. of Globasip Conf.*, Orlando, FL, Dec. 14-16, 2015.
- [C82] B. Baingana and G. B. Giannakis, “Switched Dynamic Structural Equation Models for Tracking Social Network Topologies,” *Proc. of Globasip Conf.*, Orlando, FL, Dec. 14-16, 2015.
- [C83] T. Chen, X. Wang, and G. B. Giannakis, “Energy and Workload Management for Data Centers in Renewable-Integrated Power Grid,” *Proc. of Globasip Conf.*, Orlando, FL, Dec. 14-16, 2015.
- [C84] X. Wang, T. Chen, Y. Zhang, and G. B. Giannakis, “Optimal Dynamic Power Management for Green Coordinated Multipoint Systems,” *Proc. of Globecom*, San Diego, CA, Dec. 6-10, 2015.
- [C85] B. Baingana and G. B. Giannakis, “Dynamic and Decentralized Learning of Overlapping Communities,” *Proc. 6th Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing*, Cancun, Mexico, Dec. 13-16, 2015.
- [C86] D. Romero, S.-J. Kim, and G. B. Giannakis, “Stochastic Nonparametric Regression over Dynamic Networks,” *Proc. 6th Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing*, Cancun, Mexico, Dec. 13-16, 2015.
- [C87] V. Kekatos, L. Zhang, G. B. Giannakis, and R. Baldick, “Accelerated Localized Voltage Regulation in Single-Phase Distribution Grids,” *Proc. SmartGridCom*, Miami, FL, November 2-5, 2015.
- [C88] D. K. Berberidis and G. B. Giannakis, “Budgeted Kalman Filtering and Smoothing for Economical Tracking with Big Distributed Data,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 8-11, 2015.

- [C89] S. P. Chepuri, Y. Zhang, G. Leus, and G. B. Giannakis, “Big Data Sketching with Model Mismatch,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 8-11, 2015.
- [C90] B. Baingana, E. Dall’Anese, G. Mateos, and G. B. Giannakis, “Robust Kriged Kalman Filtering,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 8-11, 2015.
- [C91] S. Hu, X. Wang, Y. Zhang, and G. B. Giannakis, “Optimal Resource Allocation for Smart-Grid Powered MIMO Broadcast Channels,” *Proc. of the 7th Intl. Conf. on Wireless Comm., and Signal Proc.*, Nanjing, P. R. China, Oct. 15-17, 2015.
- [C92] M. Mardani and G. B. Giannakis, “Online Sketching for Big Data Subspace Learning,” *Proc. of EUSIPCO*, Nice, France, Aug. 31-Sept. 4, 2015.
- [C93] F. Sheikholeslami and G. B. Giannakis, “Joint Dimensionality Reduction and Online Nonlinear Classification for Big Data,” *Proc. of EUSIPCO*, Nice, France, Aug. 31-Sept. 4, 2015.
- [C94] V. Kekatos, G. Wang, A.-J. Coneho, and G. B. Giannakis, “Stochastic Reactive Power Management in Microgrids with Renewables,” *Proc. of IEEE PES General Mtg.*, Denver, CO, July 26-30, 2015.
- [C95] E. Dall’Anese, S. Dhople, B. B. Johnson, and G. B. Giannakis, “Decentralized Optimal Dispatch of Photovoltaic Inverters in Residential Distribution Systems,” *Proc. of IEEE PES General Mtg.*, Denver, CO, July 26-30, 2015.
- [C96] E. Dall’Anese, S. Dhople, and G. B. Giannakis, “Regulation of Dynamical Systems to Optimal Solutions of Semidefinite Programs: Algorithms and Applications to AC Optimal Power Flow,” *Proc. of American Control Conf.*, Chicago, IL, July 1-3, 2015.
- [C97] A. G. Marques, S. Molinero, and G. B. Giannakis, “Underlay Multi-Hop Cognitive Networks with Orthogonal Access,” *Proc. of Intl. Workshop on Emerging Cognitive Radio Applications and Algorithms (CORAL)*, Boston, MA, June 14, 2015.
- [C98] Y. Zhang, X. Wang, G. B. Giannakis, and S. Hu, “Distributed Robust Resource Allocation for Renewable Powered Wireless Cellular Networks,” *Proc. of BlackSeaCom Conf.*, Constanta, Romania, May 18-21, 2015.
- [C99] M. Mardani, G. B. Giannakis, and L. Ying, “Accelerating Dynamic MRI via Tensor Subspace Learning,” *Proc. of ISMRM 23rd Annual Meeting and Exhibition*, Toronto, Canada, May 30-June 5, 2015.
- [C100] M. Mardani and G. B. Giannakis, “Low-rank plus sparse tensor learning: Quest for accelerated dynamic MRI,” *Proc. of International Symposium on Biomedical Imaging*, Brooklyn, NY, April 16-19, 2015.
- [C101] D. K. Berberidis, G. Wang, V. Kekatos, and G. B. Giannakis, “Online Censoring for Large-Scale Regression,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Brisbane, Australia, April 19-24, 2015 (submitted).
- [C102] D. Romero, S.-J. Kim, R. Lopez-Valcarce, and G. B. Giannakis, “Spectrum Cartography Using Quantized Observations,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Brisbane, Australia, April 19-24, 2015.

- [C103] B. Baingana and G. B. Giannakis, “Kernel-based Embeddings for Large Graphs with Centrality Constraints,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Processing*, Brisbane, Australia, April 19-24, 2015.
- [C104] P. A. Traganitis, K. Slavakis, and G. B. Giannakis, “Spectral Clustering of Large-scale Communities via Random Sketching and Validation,” *Proc. of 49th Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., Baltimore, MD, March 18-20, 2015.
- [C105] D. Romero, S.-J. Kim, and G. B. Giannakis, “Online Cartography via Quantized Measurements,” *Proc. of 49th Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., Baltimore, MD, March 18-20, 2015.
- [C106] F. Sheikholeslami and G. B. Giannakis, “Online Subspace Learning and Nonlinear Classification of Big Data with Misses,” *Proc. of 49th Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., Baltimore, MD, March 18-20, 2015.
- [C107] Y. Zhang, S.-J. Kim, and G. B. Giannakis, “Short-Term Wind Power Forecasting using Nonnegative Sparse Coding,” *Proc. of 49th Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., Baltimore, MD, March 18-20, 2015.
- [C108] Y. Shen, M. Mardani, and G. B. Giannakis, “Online Sketching of Big Categorical Data with Misses,” *Proc. of Conf. of Information Sciences and Systems*, Johns Hopkins Univ., Baltimore, March 18-20, 2015.
- 2014**
- [C109] Y. Zhang and G. B. Giannakis, “Distributed Market Clearing with Wind Generation and Large-Scale Dispatchable Loads,” *Proc. of 53rd Conf. on Dec. and Control*, Los Angeles, CA, December 15-17, 2014.
- [C110] B. Baingana and G. B. Giannakis, “Tracking anomalous community memberships in time-varying networks,” *Proc. of GlobalSIP*, Atlanta, GA, December 3-5, 2014.
- [C111] N. Y. Soltani and G. B. Giannakis, “Online learning of electric vehicle consumers,” *Proc. of Global-SIP*, Atlanta, GA, December 3-5, 2014.
- [C112] P. A. Traganitis, K. Slavakis, and G. B. Giannakis, “Clustering High-Dimensional Data via Random Sampling and Consensus,” *Proc. of GlobalSIP*, Atlanta, GA, December 3-5, 2014.
- [C113] G. Wang, D. K. Berberidis, V. Kekatos, and G. B. Giannakis, “Online Reconstruction from Big Data via Compressive Censoring,” *Proc. of GlobalSIP Conf.*, Atlanta, GA, December 3-5, 2014.
- [C114] F. Sheikholeslami, M. Mardani, and G. B. Giannakis, “Classification of Streaming Big Data with Misses,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 2-5, 2014.
- [C115] D. K. Berberidis, G. Wang, G. B. Giannakis, and V. Kekatos, “Adaptive Estimation from Big Data via Censored Stochastic Approximation,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 2-5, 2014.
- [C116] P. A. Traganitis, K. Slavakis, and G. B. Giannakis, “Big Data Clustering using Random Sampling and Consensus,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 2-5, 2014.

- [C117] S.-J. Kim and G. B. Giannakis, "Online Learning Approaches for Optimal Dynamic Power Flow," *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2-5, 2014.
- [C118] V. Kekatos, G. Wang, and G. B. Giannakis, "Stochastic Loss Minimization for Power Distribution Networks," *Proc. of North America Power Systems*, Pullman, WA, September 7-9, 2014.
- [C119] G. Martinez, Y. Zhang, and G. B. Giannakis, "An Efficient Primal-Dual Approach to Chance-Constrained Economic Dispatch for Islanded Microgrids," *Proc. of North America Power Systems*, Pullman, WA, September 7-9, 2014.
- [C120] G. Wang, S.-J. Kim, and G. B. Giannakis, "Moving-Horizon Dynamic Power System State Estimation Using Semidefinite Relaxation," *Proc. of IEEE PES General Mtg.*, Washington, DC, July 27-31, 2014.
- [C121] V. Kekatos, G. B. Giannakis, and R. Baldick, "Grid Topology Identification using Electricity Prices," *Proc. of IEEE PES General Mtg.*, Washington, DC, July 27-31, 2014.
- [C122] M. Mardani, G. Mateos, and G. B. Giannakis, "Imputation of Streaming Low-rank Tensor Data," *Proc. of Sensor Array and Multichannel SP Workshop*, A Coruna, Spain, June 22-25, 2014.
- [C123] E. Dall'Anese, S. Dhople, B. B. Johnson, and G. B. Giannakis, "Optimal Operation of Distribution Networks with Increased Photovoltaic Penetration," *Prof. of 40th Photovoltaic Specialists Conf.*, Denver, CO, June 8-13-2014.
- [C124] B. Baingana, G. Mateos, and G. B. Giannakis, "A Proximal Gradient Algorithm for Tracking Cascades Over Networks," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Florence, Italy, May 4-9, 2014.
- [C125] V. Kekatos, Y. Zhang, and G. B. Giannakis, "Kernel Selection for Power Market Inference via Block Successive Upper Bound Minimization," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Florence, Italy, May 4-9, 2014.
- [C126] K. Slavakis and G. B. Giannakis, "Online Dictionary Learning from Big Data Using Accelerated Stochastic Approximation Algorithms," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Florence, Italy, May 4-9, 2014.
- [C127] S.-J. Kim, G. Wang, and G. B. Giannakis, "Online Semidefinite Programming for Power System State Estimation," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Florence, Italy, May 4-9, 2014.
- [C128] J. D. Haupt, N. D. Sidiropoulos, and G. B. Giannakis, "Sparse Dictionary Learning from 1-bit Data," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Florence, Italy, May 4-9, 2014.
- [C129] Y. Zhang and G. B. Giannakis, "Efficient Decentralized Economic Dispatch for Microgrids with Wind Power Integration," *Proc. of 6th IEEE Green Technologies Conf.*, Corpus Christi, TX, April 2014.
- [C130] M. Zamanighomi, Z. Wang, K. Slavakis, and G. B. Giannakis, "Linear Minimum Mean-Square Error Estimation Based on High-Dimensional Data with Missing Values," *Proc. of Conf. on Information Sciences and Systems*, March 19-21, 2014.

2013

- [C131] S.-J. Kim and G. B. Giannakis, “Real-Time Electricity Pricing for Demand Response Using On-line Convex Optimization,” *Proc. of 5th IEEE PES Conf. on Innovative Smart Grid Technologies*, Washington DC, Feb. 19-22, 2014.
- [C132] E. Dall’Anese, A. G. Marques, and G. B. Giannakis, “Primary Receiver Localization Using Sparsity and Interference Tweets,” *Proc. of 5th Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing*, Saint Martin, December 15-18, 2013.
- [C133] V. Kekatos, E. Vlachos, D. Ampeliotis, G. B. Giannakis, and K. Berberidis, “Distributed Circuit Breaker Status Verification,” *Proc. of 5th Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing*, Saint Martin, December 15-18, 2013.
- [C134] B. Baingana, G. Mateos, and G. B. Giannakis, “Dynamic Structural Equation Models for Tracking Topologies of Social Networks,” *Proc. of 5th Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing*, Saint Martin, December 15-18, 2013.
- [C135] S.-J. Kim and G. B. Giannakis, “Dynamic Network Learning for Cognitive Radio Spectrum Sensing,” *Proc. of 5th Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing*, Saint Martin, December 15-18, 2013.
- [C136] N. Y. Soltani, S.-J. Kim, and G. B. Giannakis, “Dynamic Learning of Consumer Elasticity in Charging Electric Vehicles,” *Proc. of 5th Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing*, Saint Martin, December 15-18, 2013.
- [C137] G. Martinez, N. Gatsis, and G. B. Giannakis, “Stochastic Programming for Energy Planning in Microgrids with Renewables,” *Proc. of 5th Intl. Workshop on Computational Advances in Multi-Sensor Adaptive Processing*, Saint Martin, December 15-18, 2013.
- [C138] S.-J. Kim and G. B. Giannakis, “Cognitive Radio Spectrum Prediction using Dictionary Learning,” *Proc. of Globecom Conf.*, Atlanta, GA, December 9-13, 2013.
- [C139] B. Baingana, G. Mateos, and G. B. Giannakis, “Dynamic Structural Equation Models for Tracking Cascades Over Social Networks,” *Proc. of Neural Info. Proc. Systems*, Lake Tahoe, December 9-10, 2013.
- [C140] Y. Zhang, N. Gatsis, and G. B. Giannakis, “Disaggregated Bundle Methods for Distributed Market Clearing in Power Networks,” *Proc. of Global Conf. on Signal and Info. Processing*, Austin, TX, December 3-5, 2013.
- [C141] M. Mardani and G. B. Giannakis, “Robust Tomography via Network Traffic Maps Leveraging Sparsity and Low Rank,” *Proc. of Global Conf. on Signal and Info. Processing*, Austin, TX, December 3-5, 2013.
- [C142] B. Baingana, J. A. Bazerque, and G. B. Giannakis, “Identifiability of Sparse Structural Equation Models for Directed, Cyclic, and Time-varying Networks,” *Proc. of Global Conf. on Signal and Info. Processing*, Austin, TX, December 3-5, 2013.
- [C143] V. Kekatos, Y. Zhang, and G. B. Giannakis, “Low-Rank Kernel Learning for Electricity Market Inference,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Nov. 3-6, 2013.

- [C144] S.-J. Kim and G. B. Giannakis, “Forecasting Loads and Renewables via Low Rank and Sparse Matrix Factorization,” *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, November 3-6, 2013.
- [C145] E. Dall’Anese and G. B. Giannakis, “Optimal Distributed Generation Placement in Smart Microgrids via Semidefinite Relaxation,” *Proc of Asilomar Conf. on Signals, Systems, and Computers*, Pacific, Grove, CA, November 3-6, 2013.
- [C146] Y. Zhang and G. B. Giannakis, “Robust Optimal Power Flow with Wind Integration using Conditional Value-at-Risk,” *Proc. of Smart Grid Communications*, Vancouver, Canada, October 21-24, 2013.
- [C147] G. Martinez, N. Gatsis, and G. B. Giannakis, “Two-stage Stochastic Optimization for Energy Planning in Microgrids,” *Proc. of INFORMS*, Minneapolis, MN, October 6-9, 2013.
- [C148] Y. Zhang, N. Gatsis, and G. B. Giannakis, “A Stochastic Programming Approach to Power Dispatch with Renewable Energy Sources,” *Proc. of INFORMS*, Minneapolis, MN, October 6-9, 2013.
- [C149] K. Slavakis, Y. Kopsinis, S. Theodoridis, and G. B. Giannakis, “Generalized iterative thresholding for sparsity-aware online Volterra system identification,” *Proc. of Intl. Symp.on Wireless Communication Systems*, Ilmenau, Germany, August 27-30, 2013.
- [C150] E. Dall’Anese and G. B. Giannakis, “Convex Distribution System Reconfiguration using Group Sparsity,” *Proc. of Power & Energy Soc. General Meeting*, Vancouver, Canada, July 21-25, 2013.
- [C151] Y. Zhang, N. Gatsis, V. Kekatos, and G. B. Giannakis, “Risk-aware Management of Distributed Energy Sources,” *Proc. of 18th Intl. Conf. on DSP*, Santorini Island, Greece, July 1-3, 2013.
- [C152] E. Dall’Anese, A. G. Marques, and G. B. Giannakis, “Hierarchical spectrum sharing using interference tweets,” *Proc. of Signal Proc. Advances in Wireless Communications*, Darmstadt, Germany, June 16-19, 2013.
- [C153] E. Dall’Anese and G. B. Giannakis, “Convex Distribution System Reconfiguration using Group Sparsity,” *Proc. of Power & Energy Soc. General Meeting*, Vancouver, Canada, July 21-25, 2013.
- [C154] K. Slavakis, G. Leus, and G. B. Giannakis, “Online Robust Portfolio Risk Management using Total Least-Squares and Parallel Splitting Algorithms,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Proc.*, Vancouver, Canada, May 26-31, 2013.
- [C155] M. Mardani, G. Mateos, and G. B. Giannakis, “Rank Minimization for Subspace Tracking from Incomplete Data,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Proc.*, Vancouver, Canada, May 26-31, 2013.
- [C156] J. A. Bazerque, G. Mateos, and G. B. Giannakis, “Inference of Poisson Count Processes using Low-Rank Tensor Data,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Proc.*, Vancouver, Canada, May 26-31, 2013.
- [C157] M. Mardani and G. B. Giannakis, “Robust Network Traffic Estimation via Sparsity and Low Rank,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Proc.*, Vancouver, Canada, May 26-31, 2013.
- [C158] B. Baingana and G. B. Giannakis, “Centrality-Constrained Graph Embedding,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Proc.*, Vancouver, Canada, May 26-31, 2013.

2012

- [C159] A. G. Marques, E. Dall’Anese, and G. B. Giannakis, “Joint Resource Allocation and Receiver Map Estimation in Underlay Cognitive Radios,” *Proc. of Intl. Conf. on Acoust., Speech, and Signal Proc.*, Vancouver, Canada, May 26-31, 2013.
- [C160] V. Kekatos and G. B. Giannakis, “Day-Ahead Electricity Market Forecasting using Kernels,” *Proc. of IEEE-PES on Innovative Smart Grid Technologies*, Washington, DC, USA, Feb. 24-27, 2013.
- [C161] Y. Zhang, N. Gatsis, and G. B. Giannakis, “Risk-Constrained Energy Management with Multiple Wind Farms,” *Proc. of IEEE-PES on Innovative Smart Grid Technologies*, Washington, DC, USA, Feb. 24-27, 2013.
- [C162] N. Gatsis and G. B. Giannakis, “Asynchronous Subgradient Methods with Unbounded Delays for Communication Networks,” *Proc. of Conf. on Decision and Control*, Maui, Hawaii, Dec. 10-13, 2012.
- [C163] V. Kekatos and G. B. Giannakis, “Decentralized Power System State Estimation,” *Proc. of Globecom Conf.*, Anaheim, CA, USA, Dec. 3-7, 2012.
- [C164] H. Zhu and G. B. Giannakis, “Multi-area State Estimation using Distributed Semidefinite Programming for Nonlinear Power Systems,” *Proc. of 3rd Intl. Conf. on Smart Grid Communications*, Tainan, Taiwan, November 5-8, 2012.
- [C165] G. Mateos and G. B. Giannakis, “Load Curve Data Cleansing and Imputation via Sparsity and Low-rank,” *Proc. of 3rd Intl. Conf. on Smart Grid Communications*, Tainan, Taiwan, November 5-8, 2012.
- [C166] Y. Zhang, N. Gatsis, and G. B. Giannakis, “Robust Distributed Energy Management for Microgrids with Renewables,” *Proc. of 3rd Intl. Conf. on Smart Grid Communications*, Tainan, Taiwan, November 5-8, 2012.
- [C167] H. Zhu and G. B. Giannakis, “Robust Power System State Estimation for the Nonlinear AC Flow Model,” *Proc. of 44th North American Power Systems Symposium*, Univ. of Illinois at Urbana-Champaign, September 9-11, 2012.
- [C168] V. Kekatos and G. B. Giannakis, “Joint Power System State Estimation and Breaker Status Identification,” *Proc. of 44th North American Power Systems Symposium*, Univ. of Illinois at Urbana-Champaign, September 9-11, 2012.
- [C169] E. Dall’Anese, G. B. Giannakis, and B. Wollenberg, “Optimization of Unbalanced Power Distribution Networks via Semidefinite Relaxation,” *Proc. of 44th North American Power Systems Symposium*, Univ. of Illinois at Urbana-Champaign, September 9-11, 2012.
- [C170] G. Mateos and G. B. Giannakis, “Steady-State Performance Analysis of the Distributed RLS Algorithm,” *Proc. of Intl. Workshop on Machine Learning for Signal Processing*, Santander, Spain, September 23-26, 2012.
- [C171] J. A. Bazerque, G. Mateos, and G. B. Giannakis, “Nonparametric Low-Rank Tensor Approximation,” *Proc. of IEEE Workshop on Statistical Signal Processing*, Ann Arbor, USA, August 5-8, 2012.
- [C172] M. Mardani, G. Mateos, and G. B. Giannakis, “Exact Recovery of Low-Rank Plus Compressed Sparse Matrices,” *Proc. of IEEE Workshop on Statistical Signal Processing*, Ann Arbor, USA, August 5-8, 2012.

- [C173] K. Rajawat, E. Dall’Anese and G. B. Giannakis, “Dynamic Network Cartography,” *Proc. of IEEE Workshop on Statistical Signal Processing*, Ann Arbor, USA, August 5-8, 2012.
- [C174] O. Mehanna, N. Sidiropoulos, and G. B. Giannakis, “Multicast Beamforming with Antenna Selection,” *Proc. of 13th Wrkshp. on Signal Processing Advances in Wireless Communications*, Cesme, Turkey, June 17-20, 2012.
- [C175] S.-J. Kim, S. Jain, and G. B. Giannakis, “Backhaul-Constrained Multi-cell Cooperation using Compressive Sensing and Spectral Clustering,” *Proc. of 13th Wrkshp. on Signal Processing Advances in Wireless Communications*, Cesme, Turkey, June 17-20, 2012.
- [C176] M. Mardani, G. Mateos, and G. B. Giannakis, “Distributed Nuclear Norm Minimization for Matrix Completion,” *Proc. of 13th Wrkshp. on Signal Processing Advances in Wireless Communications*, Cesme, Turkey, June 17-20, 2012.
- [C177] S.-J. Kim, T.-H. Hwang, and G. B. Giannakis, “Sparse Robust Matrix Tri-factorization with Application to Cancer Genomics,” *Proc. of 3rd Intl. Workshop on Cognitive Information Processing*, Baiona, Spain, May 28-30, 2012.
- [C178] P. A. Forero, K. Rajawat, and G. B. Giannakis, “Semi-supervised Dictionary Learning for Network-wide Link Load Prediction,” *Proc. of 3rd Intl. Workshop on Cognitive Information Processing*, Baiona, Spain, May 28-30, 2012.
- [C179] E. Dall’Anese and G. B. Giannakis, “Statistical Routing for Cognitive Random Access Networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Kyoto, Japan, March 25-30, 2012.
- [C180] M. Babaie-Zadeh, B. Mehrdad, and G. B. Giannakis, “Weighted Sparse Signal Decomposition,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Kyoto, Japan, March 25-30, 2012.
- [C181] Y. Zhang, E. Dall’Anese, and G. B. Giannakis, “Distributed Robust Resource Allocation for MIMO Cognitive Networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Kyoto, Japan, March 25-30, 2012.
- [C182] N. Yahya Soltani, S.-J. Kim, and G. B. Giannakis, “Chance-Constrained Optimization of Uplink Parameters for OFDMA Cognitive Radios,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Kyoto, Japan, March 25-30, 2012.
- [C183] A. Cano and G. B. Giannakis, “Distributed Belief Propagation using Sensor Networks with Correlated Observations,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Kyoto, Japan, March 25-30, 2012.
- 2011**
- [C184] V. Kekatos and G. B. Giannakis, “A Convex Relaxation Approach to Optimal Placement of Phasor Measurement Units,” *Proc. of 4th Intl. Workshop on Comp. Advances in Multi-Sensor Adapt. Processing*, San Juan, Puerto Rico, Dec. 13-16, 2011.
- [C185] S.-J. Kim and G. B. Giannakis, “Efficient and Scalable Demand Response for the Smart Power Grid,” *Proc. of 4th Intl. Workshop on Comp. Advances in Multi-Sensor Adapt. Processing*, San Juan, Puerto Rico, Dec. 13-16, 2011.

- [C186] A. G. Marques, L. M. Lopez-Ramos, G. B. Giannakis, and J. Ramos, “Adaptive Underlay Cognitive Radios with Imperfect CSI and Probabilistic Interference Constraints,” *Proc. of 4th Intl. Workshop on Comp. Advances in Multi-Sensor Adapt. Processing*, San Juan, Puerto Rico, Dec. 13-16, 2011.
- [C187] E. Dall’Anese, and G. B. Giannakis, “Distributed Cognitive Spectrum Sensing via Group Sparse Total Least-Squares,” *Proc. of 4th Intl. Workshop on Comp. Advances in Multi-Sensor Adapt. Processing*, San Juan, Puerto Rico, Dec. 13-16, 2011.
- [C188] N. Gatsis, and G. B. Giannakis, “Residential Demand Response with Interruptible Tasks: Duality and Algorithms,” *Proc. of 50th Conf. on Decision and Control and European Control Conf.*, Orlando, FL, Dec. 12-15, 2011.
- [C189] X. Cai, J. A. Bazerque, and G. B. Giannakis, “Gene Network Inference via Sparse Structural Equation Modeling with Genetic Perturbations,” *Proc. of IEEE Intl. Workshop on Genomic Signal Proc. and Statistics*, San Antonio, TX, Dec. 4-6, 2011.
- [C190] S.-J. Kim, N. Jain, and G. B. Giannakis, “Joint Link Learning and Cognitive Radio Sensing,” *Proc. of 45th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 6-9, 2011 (invited).
- [C191] P. A. Forero, and G. B. Giannakis, “Robust Multidimensional Scaling via Outlier Sparsity Control,” *Proc. of 45th Asilomar Conf. on Signals, Systems, and Computers* Pacific Grove, CA, Nov. 6-9, 2011 (invited).
- [C192] K. Rajawat, E. Dall’Anese, and G. B. Giannakis, “Joint Power and Rate Control for Coded Cognitive Radio Networks,” *Proc. of 45th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 6-9, 2011 (invited).
- [C193] M. Mardani, G. Mateos and G. B. Giannakis, “Unveiling anomalies in large-scale networks via sparsity and low rank,” *Proc. of 45th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 6-9, 2011 (invited).
- [C194] H. Zhu, and G. B. Giannakis, “Lassoing Line Outages in the Smart Power Grid,” *Proc. of 2nd Intl. Conf. on Smart Grid Communications*, Brussels, Belgium, Oct. 17-20, 2011.
- [C195] G. Mateos and G. B. Giannakis, “Robust conjoint analysis by controlling outlier sparsity,” *Proc. of 19th European Sign. Proc. Conf.*, Barcelona, Spain, Aug. 29- Sept. 2, 2011 (invited).
- [C196] V. Kekatos, and G. B. Giannakis, “Compressive Sensing for Volterra and Polynomial Regression Models,” *Proc. of 19th European Sign. Proc. Conf.*, Barcelona, Spain, Aug. 29- Sept. 2, 2011.
- [C197] H. Zhu, and G. B. Giannakis, “Estimating the State of AC Power Systems using Semidefinite Programming,” *Proc. of 43rd North American Power Systems Symposium*, Northeastern Univ., Boston, MA, Aug. 4-6, 2011.
- [C198] E. Dall’Anese, S.-J. Kim, and G. B. Giannakis, “Admission and power control for cognitive radio networks via sequential geometric programming,” *Proc. of 17th Intl. Conf. on DSP*, Corfu Island, Greece, July 6-8, 2011 (invited).
- [C199] D. Angelosante, and G. B. Giannakis, “Group Lassoing Changes in Piecewise-Stationary Signals,” *Proc. of 17th Intl. Conf. on DSP*, Corfu Island, Greece, July 6-8, 2011.

- [C200] E. J. Msechu, and G. B. Giannakis, “Decentralized Data Selection for MAP Estimation: A Censoring and Quantization Approach,” *Proc. of 14th Intl. Conf. on Information Fusion*, Chicago, IL, July 5-8, 2011.
- [C201] S. Farahmand, G. B. Giannakis, G. Leus, Z. Tian, “Sparsity-aware Kalman Tracking of Target Signal Strengths on a Grid,” *Proc. of 14th Intl. Conf. on Information Fusion*, Chicago, IL, July 5-8, 2011.
- [C202] E. J. Msechu, and G. B. Giannakis, “Distributed Measurement Censoring for Estimation with Wireless Sensor Networks,” *Proc. of 12th Wrkshp. on Signal Processing Advances in Wireless Communications*, San Francisco, California, USA, June 26-29, 2011.
- [C203] E. Dall’Anese, J. A. Bazerque, H. Zhu, and G. B. Giannakis, “Group Sparse Total Least-Squares for Cognitive Spectrum Sensing,” *Proc. of 12th Wrkshp. on Signal Processing Advances in Wireless Communications*, San Francisco, California, USA, June 26-29, 2011.
- [C204] M. Mardani, S.-J. Kim, and G. B. Giannakis, “Optimization of Wireless Multi-hop Networks with Random Access,” *Proc. of 12th Wrkshp. on Signal Processing Advances in Wireless Communications*, San Francisco, California, USA, June 26-29, 2011.
- [C205] E. Dall’Anese, S.-J. Kim, G. B. Giannakis, and S. Pupolin, “Power Allocation for Cognitive Radio Networks Under Channel Uncertainty,” *Proc. of Intl. Conf. on Communications*, Kyoto, Japan, June 5-9, 2011.
- [C206] G. B. Giannakis, G. Mateos, S. Farahmand, and H. Zhu, “USPACOR: Universal sparsity-controlling outlier rejection,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- [C207] S.-J. Kim, N. Y. Soltani, and G. B. Giannakis, “Resource allocation for OFDMA cognitive radios under channel uncertainty,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- [C208] P. A. Forero, V. Kekatos, and G. B. Giannakis, “Outlier-aware robust clustering,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- [C209] J. A. Bazerque, G. Mateos, and G. B. Giannakis, “Basis pursuit for spectrum cartography,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- [C210] H. Zhu, G. B. Giannakis, and G. Leus, “Weighted and structured sparse total least-squares for perturbed compressive sampling,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- [C211] G. Mateos and G. B. Giannakis, “Robust nonparametric regression by controlling sparsity,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- [C212] D. Angelosante and G. B. Giannakis, “Sparse graphical modeling of piecewise-stationary time series,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- [C213] A. G. Marques, G. B. Giannakis, L. M. Lopez-Ramos, and J. Ramos “Stochastic resource allocation for cognitive radio networks based on imperfect state information,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.

2010

- [C214] I. D. Schizas and G. B. Giannakis, "Eigenspace Sparsity for Compression and Denoising," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- [C215] N. Gatsis and G. B. Giannakis, "Cooperative Multi-Residence Demand Response Scheduling," *Proc. of 45th Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., Baltimore, MD, March 23-25, 2011.
- [C216] K. Rajawat, N. Gatsis, S.-J. Kim, and G. B. Giannakis, "Cross-layer Design of Coded Multicast for Wireless Random Access Networks," *Proc. of 45th Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., Baltimore, MD, March 23-25, 2011.
- [C217] G. Mateos, J.-A. Bazerque and G. B. Giannakis, "Parallelizable Algorithms for the Selection of Grouped Variables," *Proc. of 14th DSP Wkshp.*, Sedona, AZ, Jan. 4-7, 2011.
- [C218] S.-J. Kim, G. Li, and G. B. Giannakis, "Minimum-Delay Spectrum Sensing for Multi-Band Cognitive Radios," *Proc. of Globecom Conf.*, Miami, FL, December 6-10, 2010.
- [C219] Z. Wang, S. Zhou, G. B. Giannakis, C. R. Berger, and J. Huang, "Frequency-Domain Oversampling for Zero-Padded OFDM in Underwater Acoustic Communications," *Proc. of Globecom Conf.*, Miami, FL, December 6-10, 2010.
- [C220] D. Angelosante, and G. B. Giannakis, "Adaptive Coordinate Descent for Distributed Tracking of Sparse Signals," *Proc. of 44th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 7-10, 2010 (invited).
- [C221] I. D. Schizas and G. B. Giannakis, "Sparsity-Cognizant Subspace Tracking for Dimensionality Reduction," *Proc. of 44th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 7-10, 2010 (invited).
- [C222] N. Gatsis and G. B. Giannakis, "Imperfect Exchanges in Power Control via Perturbed Saddle Point Methods," *Proc. of 48th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, Sept. 29-Oct. 1, 2010.
- [C223] K. Rajawat, N. Gatsis, and G. B. Giannakis, "Cross-Layer Designs in Wireless Fading Networks with Multicast," *Proc. of 3rd Intl. Workshop on Wireless Network Coding*, Boston, MA, June 21-25, 2010.
- [C224] V. Kekatos and G. B. Giannakis, "Selecting Reliable Sensors via Convex Optimization," *Proc. of Wrkshp. on Signal Processing Advances in Wireless Communications*, Marrakech, Morocco, June 20 - 23, 2010.
- [C225] H. Zhu, G. Leus, and G. B. Giannakis, "Sparse Regularized Total Least-Squares for Sensing Applications," *Proc. of Wrkshp. on Signal Processing Advances in Wireless Communications*, Marrakech, Morocco, June 20 - 23, 2010.
- [C226] G. Li, A. Cano, and G. B. Giannakis, "High-Throughput Cooperative Transmissions using Adaptive Complex-Field Network Coding," *Proc. of Wrkshp. on Signal Processing Advances in Wireless Communications*, Marrakech, Morocco, June 20 - 23, 2010.

- [C227] S.-J. Kim, E. Dall’Anese, and G. B. Giannakis, “Collaborative Channel Gain Map Tracking for Cognitive Radio,” *Proc. of 2nd Intl. Workshop on Cognitive Info. Processing*, Elba Island, Italy, June 14-16, 2010.
- [C228] P. Forero, A. Cano, and G. B. Giannakis, “Consensus-Based Distributed Linear Support Vector Machines,” *Proc. of 9th ACM/IEEE Intl. Conf. on Information Processing in Sensor Networks*, Stockholm, Sweden, April 12-16, 2010.
- [C229] A. G. Marques and G. B. Giannakis, “Adaptive Cross-Layer Resource Allocation for Wireless Orthogonal-Access Networks,” *Proc. of European Wireless Conf.*, Lucca, Italy, April 12-15, 2010.
- [C230] H. Zhu, G. Mateos, G. B. Giannakis, N. D. Sidiropoulos, and A. Banerjee, “Sparsity-Cognizant Overlapping Co-Clustering for Behavior Inference in Social Networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Dallas, Texas, March 14-19, 2010.
- [C231] S. Farahmand, S. Roumeliotis, and G. B. Giannakis, “Particle Filter Adaptation for Distributed Sensors via Set Membership,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Dallas, Texas, March 14-19, 2010.
- [C232] S.-J. Kim and G. B. Giannakis, “Sequential Cooperative Sensing for Multi-Channel Cognitive Radios,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Dallas, Texas, March 14-19, 2010.
- [C233] J.-A. Bazerque, G. Mateos, and G. B. Giannakis, “Distributed Lasso for In-Network Linear Regression,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Dallas, Texas, March 14-19, 2010.
- [C234] D. Angelosante, G. B. Giannakis, and N. Sidiropoulos, “Multiple Frequency-Hopping Signal Estimation via Sparse Regression,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Dallas, Texas, March 14-19, 2010.
- [C235] A. Cano, P. Forero, and G. B. Giannakis, “Convergence Analysis of Consensus-Based Distributed Clustering,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Dallas, Texas, March 14-19, 2010.
- [C236] A. G. Marques, G. B. Giannakis, and J. Ramos, “Stochastic Cross-Layer Resource Allocation for Wireless Networks using Orthogonal Access: Optimality and Delay Analysis,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Dallas, Texas, March 14-19, 2010.
- 2009**
- [C237] S.-J. Kim, E. Dall’Anese, and G. B. Giannakis, “Spectrum Sensing for Cognitive Radios using Kriged Kalman Filtering,” *Proc. of 3rd Intl. Workshop on Comp. Advances in Multi-Sensor Adapt. Proc.*, Aruba Island, Dec. 13-16, 2009.
- [C238] V. Kekatos, D. Angelosante, and G. B. Giannakis, “Sparsity-Aware Estimation of Nonlinear Volterra Kernels,” *Proc. of 3rd Intl. Workshop on Comp. Advances in Multi-Sensor Adapt. Proc.*, Aruba Island, Dec. 13-16, 2009.
- [C239] I. D. Schizas, G. B. Giannakis, and N. D. Sidiropoulos, “Exploiting Covariance-domain Sparsity for Dimensionality Reduction,” *Proc. of 3rd Intl. Workshop on Comp. Advances in Multi-Sensor Adapt. Proc.*, Aruba Island, Dec. 13-16, 2009.

- [C240] S.-J. Kim, E. Dall'Anese, and G. B. Giannakis, "Sparsity-Aware Cooperative Cognitive Radio Sensing Using Channel Gain Maps," *Proc. of 43rd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 1-4, 2009.
- [C241] G. Mateos, J.-A. Bazerque, and G. B. Giannakis, "Spline-based Spectrum Cartography for Cognitive Radios," *Proc. of 43rd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 1-4, 2009.
- [C242] D. Angelosante, S. Roumeliotis, and G. B. Giannakis, "Lasso Kalman Filtering for Tracking Sparse Signals," *Proc. of 43rd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 1-4, 2009.
- [C243] G. N. Lilis, D. Angelosante, and G. B. Giannakis, "Parsimonious Sound Field Synthesis using Compressive Sampling," *Proc. of Wrksp. on Applications of Signal Proc. to Audio and Acoustics*, New Paltz, NY, Oct. 18-21, 2009.
- [C244] D. Angelosante, J.-A. Bazerque, and G. B. Giannakis, "Online Coordinate Descent for Adaptive Estimation of Sparse Signals," *Proc. of IEEE Workshop on Statistical Signal Processing*, Cardiff, Wales, UK, Aug. 31-Sept. 3, 2009.
- [C245] D. Angelosante, E. Grossi, and G. B. Giannakis, "Compressed Sensing of Time-Varying Signals," *Proc. of Intl. Conf. on Digital Signal Processing*, Santorini, Greece, July 5-7, 2009.
- [C246] H. Zhu and G. B. Giannakis, "Sparsity-Embracing Multiuser Detection for CDMA Systems with Low Activity Factor," *Proc. of Intl. Symp. on Info. Theory*, Seoul, Korea, June 28 - July 3, 2009.
- [C247] K. Rajawat, and G. B. Giannakis, "Non-random Wireless Network Coding," *Proc. of IEEE Wireless Network Coding Workshop*, Rome, Italy, June 22, 2009.
- [C248] D. Angelosante, E. Grossi, G. B. Giannakis, and M. Lops, "Sparsity-Aware Estimation of CDMA System Parameters," *Proc. of Wrkshp. on Signal Processing Advances in Wireless Communications*, Perugia, Italy, June 21 - 24, 2009.
- [C249] N. Trawny, S. Roumeliotis, and G. B. Giannakis, "Cooperative Multi-Robot Localization under Communication Constraints," *Proc. of Intl. Conf. on Robotics and Automation*, Kobe, Japan, May 12 - 17, 2009.
- [C250] D. Angelosante, and G. B. Giannakis, "RLS-Weighted LASSO for Adaptive Estimation of Sparse Signals," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Taipei, Taiwan, April 9-14, 2009.
- [C251] K. Rajawat, and G. B. Giannakis, "An Algebraic Polyphase Approach to Wireless Network Coding," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Taipei, Taiwan, April 9-14, 2009.
- [C252] T. Wang, and G. B. Giannakis, "Capacity Scaling of Wireless Networks with Complex Field Network Coding," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Taipei, Taiwan, April 9-14, 2009.
- [C253] N. Gatsis, A. Ribeiro, and G. B. Giannakis, "Cross-Layer Optimization of Wireless Fading Ad-hoc Networks," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Taipei, Taiwan, April 9-14, 2009.

2008

- [C254] A. G. Marques, G. B. Giannakis, and J. Ramos, “Stochastic resource allocation for orthogonal access based on quantized CSI: Optimality, convergence and delay analysis,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Taipei, Taiwan, April 9-14, 2009.
- [C255] A. Cano, J. Gomez-Vilardebo, A. Isabel Perez-Neira, and G. B. Giannakis, “High-rate distributed multi-source cooperation using complex field coding,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Taipei, Taiwan, April 9-14, 2009.
- [C256] S.-J. Kim, and G. B. Giannakis, “Rate-Optimal and Reduced-Complexity Sequential Sensing Algorithms for Cognitive OFDM Radios,” *Proc. of 43rd Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., Baltimore, MD, March 18-20, 2009.
- [C257] G. Mateos, I. D. Schizas, and G. B. Giannakis, “Closed-Form MSE Performance of the Distributed LMS Algorithm,” *Proc. of DSP Workshop*, Marco Island, FL, January 4-7, 2009.
- [C258] P. Forero, A. Cano and G. B. Giannakis “Consensus-based Distributed Modulation Classification using Wireless Sensor Networks,” *Proc. of MILCOM Conf.*, San Diego, CA, Nov. 17-19, 2008.
- [C259] J.-A. Bazerque and G. B. Giannakis, “Distributed Spectrum Sensing for Cognitive Radios by Exploiting Sparsity,” *Proc. of 42nd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 26-29, 2008.
- [C260] A. Ribeiro and G. B. Giannakis, “Optimal Layered Architectures for Wireless Networks,” *Proc. of 42nd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 26-29, 2008.
- [C261] H. Zhu, A. Cano and G. B. Giannakis, “Distributed Equalization and Decoding using Wireless Sensor Networks,” *Proc. of 42nd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 26-29, 2008.
- [C262] S.-J. Kim and G. B. Giannakis, “Optimization of MIMO Ad Hoc Cognitive Radio Networks,” *Proc. of 46th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, Sept. 23-26, 2008.
- [C263] A. Ribeiro, G. B. Giannakis and A. Swami, “Robust Stochastic Routing in Wireless Ad Hoc Networks,” *Proc. of Intl. Wireless Comm. and Mobile Computing Conf.*, Crete, Greece, Aug. 6-8, 2008.
- [C264] X. Wang and G. B. Giannakis, “Ergodic Capacity and Average Rate-Guaranteed Scheduling for Wireless Multiuser OFDM Systems,” *Proc. of the Intl. Symp. on Info. Theory*, Toronto, Canada, July 6-11, 2008.
- [C265] A. G. Marques, G. B. Giannakis and F. Javier Ramos, “Optimum Scheduling for Orthogonal Multiple Access over Fading Channels using Quantized Channel State Information,” *Proc. of Workshop on Sig. Proc. Advances in Wireless Comm.*, Recife, Brazil, July 06-09, 2008.
- [C266] P. Forero, A. Cano and G. B. Giannakis “Consensus-based k-means Algorithm for Distributed Learning using Wireless Sensor Networks,” *Workshop on Sensors, Signal and Information Processing*, Sedona, Arizona, May 11-14, 2008 (invited).
- [C267] N. Gatsis, A. G. Marques and G. B. Giannakis, “Utility-based power control for peer-to-peer cognitive radio networks with heterogeneous QoS constraints,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Las Vegas, Nevada, March 30-April 4, 2008.

- [C268] P. Forero, A. Cano and G. B. Giannakis, “Consensus-based distributed Expectation-Maximization algorithm for density estimation and classification using wireless sensor networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Las Vegas, Nevada, March 30-April 4, 2008.
- [C269] E. Msechu, A. Ribeiro, S. Roumeliotis and G. B. Giannakis, “Distributed Kalman filtering based on quantized innovations,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Las Vegas, Nevada, March 30-April 4, 2008.
- [C270] I. D. Schizas, G. Mateos and G. B. Giannakis, “Stability analysis of the consensus-based distributed LMS algorithm,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Las Vegas, Nevada, March 30-April 4, 2008.
- [C271] A. G. Marques, X. Wang and G. B. Giannakis, “Optimal stochastic dual resource allocation for cognitive radios based on quantized CSI,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Las Vegas, Nevada, March 30-April 4, 2008.
- [C272] S. Farahmand, A. Cano and G. B. Giannakis, “Anti-jam distributed MIMO decoding using wireless sensor networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Las Vegas, Nevada, March 30-April 4, 2008.
- [C273] A. Ribeiro and G. B. Giannakis, “Optimal FDMA over wireless fading mobile ad-hoc networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Las Vegas, Nevada, March 30-April 4, 2008.
- [C274] H. Zhu, A. Cano and G. B. Giannakis, “Distributed In-Network Channel Decoding Using Consensus on Log-Likelihood Ratio Averages,” *Proc. of Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 19-21, 2008.
- 2007 [C275] A. Ribeiro and G. B. Giannakis, “Separation Theorems for Wireless Networking,” *Proc. of Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 19-21, 2008.
- [C276] H. Zhu, A. Cano, and G. B. Giannakis, “Consensus-Based Distributed MIMO Decoding Using Semi-Definite Relaxation,” *Proc. of 2nd Intl. Workshop on Comp. Advances in Multi-Sensor Adapt. Proc.*, St. Thomas, U.S. Virgin Islands, Dec. 12-14, 2007.
- [C277] I. D. Schizas, G. Mateos and G. B. Giannakis, “Distributed Recursive Least-Squares Using Wireless Ad Hoc Sensor Networks,” *Proc. of 41st Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 4-7, 2007.
- [C278] E. Msechu, S. Roumeliotis, A. Ribeiro, and G. B. Giannakis, “Distributed Iteratively Quantized Kalman Filtering Using Wireless Sensor Networks,” *Proc. of 41st Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 4-7, 2007.
- [C279] G. Mateos, I. D. Schizas and G. B. Giannakis, “Distributed Least-Mean Square Algorithm Using Wireless Ad Hoc Networks,” *Proc. of 45th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, Sept. 26-28, 2007.
- [C280] A. Marques, X. Wang and G. B. Giannakis, “Channel-Adaptive Resource Allocation for Cognitive OFDMA Radios based on Limited-Rate Feedback,” *Proc. of XV European Sign. Proc. Conf.*, Poznan, Poland, Sept. 3-7, 2007 (invited).

- [C281] I. Schizas, G. B. Giannakis, S. Roumeliotis and A. Ribeiro, “Anytime Optimal Distributed Kalman Filtering and Smoothing,” *Proc. of Wrkshp. on Statistical Signal Processing*, Madison, WI, August 26-29, 2007.
- [C282] H. Zhu, I. Schizas and G. B. Giannakis, “Power-Efficient Dimensionality Reduction for Distributed Channel-Aware Kalman Tracking Using Wireless Sensor Networks,” *Proc. of Wrkshp. on Statistical Signal Processing*, Madison, WI, August 26-29, 2007.
- [C283] ★ J.-A. Bazerque and G. B. Giannakis, “Distributed Scheduling and Resource Allocation for Cognitive OFDMA Radios,” *Proc. of Intl. Conf. on Cognitive Radio Oriented Wireless Networks & Coms.*, Orlando, FL, August 1-3, 2007.
- ★ **Received the Best Student Paper Award.**
- [C284] A. G. Marques, G. B. Giannakis, F. Digham, F. J. Ramos, “Reduced-Complexity Power-Efficient Wireless OFDMA using an Equally Probable CSI Quantizer,” *Proc. of Intl. Conf. on Communications*, Glasgow, Scotland, UK, June 24-28, 2007.
- [C285] X. Wang and G. B. Giannakis, “A Stochastic Framework for Scheduling in Wireless Packet Access Networks,” *Proc. of Intl. Conf. on Communications*, Glasgow, Scotland, UK, June 24-28, 2007.
- [C286] X. Wang and G. B. Giannakis, “Resource Allocation for Power-Efficient TDMA under Individual Rate Constraints,” *Proc. of Intl. Conf. on Communications*, Glasgow, Scotland, UK, June 24-28, 2007.
- [C287] A. Ribeiro and G. B. Giannakis, “Joint Stochastic Routing and Scheduling for Multihop Wireless Ad-hoc Networks,” *Proc. of Wrkshp. on Signal Processing Advances in Wireless Com.*, Helsinki, Finland, June 17- 20, 2007.
- [C288] I. D. Schizas, G. B. Giannakis and A. Ribeiro, “Distributed MAP and LMMSE Estimation of Random Signals Using Ad Hoc Wireless Sensor Networks with Noisy Links,” *Proc. of Wrkshp. on Signal Processing Advances in Wireless Com.*, Helsinki, Finland, June 17- 20, 2007.
- [C289] Y. Yu and G. B. Giannakis, “Joint Congestion Control and OFDMA Scheduling for Hybrid Wireline-Wireless Networks,” *Proc. of INFOCOM Conf.*, Anchorage, Alaska, May 6-12, 2007.
- [C290] A. Ribeiro, Z.-Q. Luo, N. D. Sidiropoulos, and G. B. Giannakis, “Modelling and Optimization of Stochastic Routing for Wireless Multi-hop Networks,” *Proc. of INFOCOM Conf.*, Anchorage, Alaska, May 6-12, 2007.
- [C291] T. Wang and G. B. Giannakis, “Mutual Information Jammer-Relay Games,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Honolulu, Hawaii, April 15-20, 2007.
- [C292] A. G. Marques, X. Wang and G. B. Giannakis, “Optimizing Energy Efficient of TDMA with Finite Rate Feedback,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Honolulu, Hawaii, April 15-20, 2007.
- [C293] A. Ribeiro, N. D. Sidiropoulos, and G. B. Giannakis, “Distributed Routing Algorithms for Wireless Multihop Networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Honolulu, Hawaii, April 15-20, 2007.

- [C294] I. D. Schizas, A. Ribeiro, and G. B. Giannakis, “Consensus Based Distributed Parameter Estimation in Ad Hoc Wireless Sensor Networks with Noisy Links,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Honolulu, Hawaii, April 15-20, 2007.
- [C295] S. Shahbazpanahi, A. Gershman and G. B. Giannakis, “Semiblind Channel and Carrier Frequency-Offset Estimation for Orthogonally Space-Time Block Coded MIMO Systems,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Honolulu, Hawaii, April 15-20, 2007.
- [C296] Z. Tian and G. B. Giannakis, “Compressed Sensing for Wideband Cognitive Radios,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Honolulu, Hawaii, April 15-20, 2007.
- [C297] A. G. Marques, X. Wang and G. B. Giannakis, “Minimizing Transmit-Power for Coherent Communications in Wireless Sensor Networks Using Quantized Channel State Information,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Honolulu, Hawaii, April 15-20, 2007.
- [C298] X. Wang, G. B. Giannakis and Y. Yu, “Weighted Sum-Rate Optimal OFDMA Scheduling,” *Proc. of 41st Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., NJ, March 14-16, 2007.
- [C299] Y. Wu, A. Ribeiro, and G. B. Giannakis, “Robust Routing in Wireless Multi-Hop Networks,” *Proc. of 41st Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., NJ, March 14-16, 2007.
- [C300] S. Farahmand, G. B. Giannakis, and X. Wang, “Max-Min Strategies for Power-Limited Games in the Presence of Correlated Jamming,” *Proc. of 41st Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., NJ, March 14-16, 2007.
- [C301] T. Wang and G. B. Giannakis, “High-Throughput Cooperative Communications with Complex-Field Network Coding,” *Proc. of 41st Conf. on Info. Sciences and Systems*, Johns Hopkins Univ., NJ, March 14-16, 2007.
- [C302] X. Wang and G. B. Giannakis, “Stochastic Primal-Dual Scheduling Subject to Rate Constraints,” *Proc. of Wireless Com. & Networking Conf.*, Hong Kong, March 11-15, 2007.
- [C303] A. G. Marques, G. B. Giannakis, F. F. Digham, and F. J. Ramos, “Minimizing Power in Wireless OFDMA with Limited-Rate Feedback,” *Proc. of Wireless Com. & Networking Conf.*, Hong Kong, March 11-15, 2007.
- 2006**
- [C304] A. Cano, T. Wang, A. Ribeiro and G. B. Giannakis, “A Link-Adaptive Distributed Coding for Multi-Source Cooperation,” *Proc. of Globecom Conf.*, St. Francisco, CA, Nov. 27-Dec. 1, 2006.
- [C305] S. Farahmand and G. B. Giannakis, “A High-Rate Differential UWB Radio,” *Proc. of Globecom Conf.*, St. Francisco, CA, Nov. 27-Dec. 1, 2006.
- [C306] A. G. Marques, X. Wang and G. B. Giannakis, “Energy Efficient MIMO Systems Using Adaptive Modulation and Coding,” *Proc. of 40th Asilomar Conf. on Signals, Systems and Computers*, Pacific Grove, CA, Oct. 29-Nov. 1, 2006 (invited).
- [C307] A. Ribeiro, Z.-Q. Luo, N. D. Sidiropoulos and G. B. Giannakis, “A General Optimization Framework for Stochastic Routing in Wireless Multi-hop Networks,” *Proc. of 40th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 29-Nov. 1, 2006.

- [C308] I. D. Schizas and G. B. Giannakis, “Consensus-Based Distributed Estimation of Random Signals with Wireless Sensor Networks,” *Proc. of 40th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 29-Nov. 1, 2006.
- [C309] F. Digham and G. B. Giannakis, “An Energy-Aware Sleeping Protocol for Wireless Sensor Networks,” *Proc. of MILCOM Conf.*, Washington, DC, October 23-25, 2006.
- [C310] T. Wang, A. Cano and G. B. Giannakis, “Link Adaptive Cooperative Communications Without Channel State Information,” *Proc. of MILCOM Conf.*, Washington, DC, October 23-25, 2006.
- [C311] A. Marques, X. Wang and G. B. Giannakis, “Energy-Efficient TDMA with Quantized Channel State Information,” *Proc. of MILCOM Conf.*, Washington, DC, October 23-25, 2006.
- [C312] Y. Yu and G. B. Giannakis, “Cross-Layer Congestion and Contention Control for Wireless Ad Hoc Networks,” *Proc. of 44th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, Sept. 26-29, 2006.
- [C313] I. Schizas, A. Ribeiro and G. B. Giannakis, “Distributed Estimation with Ad Hoc Wireless Sensor Networks,” *Proc. of XIV European Sign. Proc. Conf.*, Florence, Italy, Sept. 4-8, 2006 (invited).
- [C314] T. Wang, A. Cano, G. B. Giannakis, and F. J. Ramos, “Multi-Tier Cooperative Broadcasting with Hierarchical Modulations,” *Proc. of XIV European Sign. Proc. Conf.*, Florence, Italy, Sept. 4-8, 2006.
- [C315] X. Wang and G. B. Giannakis, “Energy-Efficient Resource Allocation in TDMA over Fading Channels,” *Proc. of the Intl. Symp. on Info. Theory*, Seattle, Washington, July 9-14, 2006.
- [C316] R. Wang, A. Ribeiro, and G. B. Giannakis, “Multi-Source Cooperative Protocols with Full-Diversity, Spectral-Efficiency and Controllable-Complexity,” *Proc. of Wrksp. on Signal Processing Advances in Wireless Com.*, Cannes, France, July 2-5, 2006.
- [C317] A. G. Marques, F. F. Digham, and G. B. Giannakis, “Power-Efficient OFDM via Quantized Channel State Information,” *Proc. of Intl. Conf. on Communications*, Istanbul, Turkey, June 11-15, 2006.
- [C318] X. Wang, Q. Liu, and G. B. Giannakis, “Analyzing and Optimizing Adaptive Modulation-Coding Jointly with ARQ for QoS-Guaranteed Traffic,” *Proc. of Intl. Conf. on Communications*, Istanbul, Turkey, June 11-15, 2006.
- [C319] R. Wang, and G. B. Giannakis, “Complex-Field Coding in Multi-Source Cooperative Coding for Full Diversity,” *Proc. of Intl. Conf. on Communications*, Istanbul, Turkey, June 11-15, 2006.
- [C320] A. Cano, X. Ma, and G. B. Giannakis, “Space-Time Differential Modulation using Linear Constellation Precoding,” *Proc. of Intl. Conf. on Communications*, Istanbul, Turkey, June 11-15, 2006.
- [C321] R. Wang, W. Zhao and G. B. Giannakis, “CRC-Assisted Error Correction in a Convolutionally Coded System,” *Proc. of Intl. Conf. on Communications*, Istanbul, Turkey, June 11-15, 2006.
- [C322] X. Luo and G. B. Giannakis, “Achievable Rates of Transmitter-Reference Ultra-Wideband Radio with PPM,” *Proc. of Intl. Conf. on Communications*, Istanbul, Turkey, June 11-15, 2006.
- [C323] Z. Tian and G. B. Giannakis, “A Wavelet Approach to Wideband Spectrum Sensing for Cognitive Radios,” *Proc. of Intl. Conf. on Cognitive Radio Oriented Wireless Networks & Coms.*, Mykonos Island, Greece, June 8-10, 2006.

- [C324] A. G. Marques, F. F. Digham, and G. B. Giannakis, “Power-Efficient OFDM with Reduced Complexity and Feedback Overhead,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Toulouse, France, May 15-19, 2006.
- [C325] I. D. Schizas, G. B. Giannakis and Z.-Q. Luo, “Optimal Dimensionality Reduction for Multi-Sensor Fusion in the Presence of Fading and Noise,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Toulouse, France, May 15-19, 2006.
- [C326] ★ A. Ribeiro, G. B. Giannakis, and S. Roumeliotis, “SOI-KF: Distributed Kalman Filtering with Low-Cost Communications using the Sign of Innovations,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Toulouse, France, May 15-19, 2006.
- ★ **Received the Best Student Paper Award.**
- [C327] X. Wang, Y. Yu, and G. B. Giannakis, “Combining Random Backoff with a Cross-Layer Tree Algorithm for Random Access in IEEE 802.16,” *Proc. of Wireless Com. & Networking Conf.*, Las Vegas, NV, April 3-6, 2006.
- [C328] Y. Yu and G. B. Giannakis, “Joint Low-Density Parity-Check Coding and Linear Precoding for Rayleigh Fading Channels,” *Proc. of 40th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 22-24, 2006.
- [C329] X. Wang, Y. Yu, and G. B. Giannakis, “A Deadlock-Free High-Throughput Tree Algorithm for Random Access over Fading Channels,” *Proc. of 40th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 22-24, 2006.
- [C330] T. Wang, R. Wang, and G. B. Giannakis, “Smart Regenerative Relays for Link-Adaptive Cooperation,” *Proc. of 40th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 22-24, 2006.
- [C331] R. Wang, W. Zhao and G. B. Giannakis, “Distributed Trellis Coded Modulation for Multi-Source Cooperative Networks,” *Proc. of the IEEE Radio Wireless Symposium*, San Diego, CA, Jan. 17-19, 2006.
- 2005**
- [C332] A. Ribeiro, R. Wang, and G. B. Giannakis, “Linear Complex-Field Coding for Cooperative Networking,” *Proc. of Wrkshp. on Computational Advances in Multi-Sensor Adaptive Processing*, Puerto Vallarta, Mexico, December 13-15, 2005.
- [C333] S. Farahmand, Z.-Q. Luo, G. B. Giannakis, and R. D’Andrea, “An Affine Approximation to the Robust Beamforming Problem,” *Proc. of Wrkshp. on Computational Advances in Multi-Sensor Adaptive Processing*, Puerto Vallarta, Mexico, December 13-15, 2005.
- [C334] X. Wang, Y. Yu, and G. B. Giannakis, “A Robust High-Throughput Tree Algorithm Using Successive Interference Cancellation,” *Proc. of Globecom Conf.*, St. Louis, MO, Nov. 28-Dec. 2, 2005.
- [C335] S. Farahmand, X. Luo, and G. B. Giannakis, “Demodulation with Dirty Templates for UWB Impulse Radios,” *Proc. of Globecom Conf.*, St. Louis, MO, Nov. 28-Dec. 2, 2005.
- [C336] T. Wang, Y. Yao, and G. B. Giannakis, “Non-Coherent Distributed Space-Time Processing for Multiuser Cooperative Transmissions,” *Proc. of Globecom Conf.*, St. Louis, MO, Nov. 28-Dec. 2, 2005.

- [C337] I. D. Schizas, G. B. Giannakis and Z.-Q. Luo, “Distributed Estimation Using Reduced Dimensionality Sensor Observations,” *Proc. of 39th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 30-Nov. 2, 2005.
- [C338] F. Ali Shah, A. Ribeiro and G. B. Giannakis, “Bandwidth-Constrained MAP Estimation for Wireless Sensor Networks,” *Proc. of 39th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 30-Nov. 2, 2005.
- [C339] R. Wang, W. Zhao and G. B. Giannakis, “Multi-Source Cooperative Networks with Distributed Convolutional Coding,” *Proc. of 39th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 30-Nov. 2, 2005. (Paper Won the 2nd Award in the Student Paper Contest.)
- [C340] X. Luo and G. B. Giannakis, “Synchronization of Multiple Ultra-Wideband Piconets,” *Proc. of 39th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 30-Nov. 2, 2005 (invited).
- [C341] T. Wang, A. Cano and G. B. Giannakis, “Efficient Demodulation in Cooperative Schemes Using Decode-and-Forward Relays,” *Proc. of 39th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, Oct. 30-Nov. 2, 2005.
- [C342] Q. Tang, L. Yang, and G. B. Giannakis, “Battery Power Efficiency of PPM and FSK in Wireless Sensor Networks,” *Proc. of MILCOM Conf.*, Atlantic City, NJ, October 17-20, 2005 (invited).
- [C343] I. D. Schizas, G. B. Giannakis and N. Jindal, “Distortion-Rate Analysis for Distributed Estimation with Wireless Sensor Networks,” *Proc. of 43rd Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, Sept. 28-30, 2005.
- [C344] S. Farahmand, X. Luo, and G. B. Giannakis, “Asymptotic Performance of Timing with Dirty Templates for UWB Impulse Radios,” *Proc. of Intl. Conf. on Ultra-Wideband*, Swiss Federal Inst. of Tech., Zurich, Switzerland, Sept. 5-9, 2005 (invited).
- [C345] Z.-Q. Luo, S. Zhang and G. B. Giannakis, “Optimal Linear Decentralized Estimation in a Bandwidth Constrained Sensor Network,” *Proc. of the Intl. Symp. on Info. Theory*, Adelaide, Australia, Sept. 4-9, 2005.
- [C346] Q. Liu, X. Wang and G. B. Giannakis, “Cross-Layer Scheduler Design with QoS Support for Broadband Wireless Access Networks,” *Proc. of 2nd Intl. Conf. on QoS in Heterogeneous Wired/Wireless Networks (QShine)*, Orlando, FL, August 22-24, 2005.
- [C347] A. Ribeiro and G. B. Giannakis, “Distributed Kalman Filtering based on Severely Quantized WSN data,” *Proc. of Wrkshp. on Statistical Signal Processing*, Bordeaux, France, July 17-20, 2005 (invited).
- [C348] X. Wang and G. B. Giannakis, “CSMA/CCA: A Modified CSMA/CA Protocol Mitigating the Fairness Problem for IEEE 802.11 DCF,” *Proc. of Intl. Conf. on Multimedia Services Access Networks*, Orlando, Florida, June 13-15, 2005 (invited).
- [C349] X. Luo and G. B. Giannakis, “Efficient Synchronization-Demodulation for UWB Ad Hoc Access: Performance Analysis and Comparison with RAKE,” *Proc. of Wrksp. on Signal Processing Advances in Wireless Com.*, New York City, NY, USA, June 5-8, 2005 (invited).

- [C350] A. Ribeiro, N. D. Sidiropoulos and G. B. Giannakis, “Achieving Wireline Random Access Throughput in Wireless Networking via User Cooperation,” *Proc. of Wrksp. on Signal Processing Advances in Wireless Com.*, New York City, NY, USA, June 5-8, 2005 (invited).
- [C351] J.-J. Xiao, Z.-Q. Luo and G. B. Giannakis, “Performance Bounds for the Rate-Constrained Universal Decentralized Estimators in Sensor Networks,” *Proc. of Wrksp. on Signal Processing Advances in Wireless Com.*, New York City, NY, USA, June 5-8, 2005.
- [C352] S. Shahbazpanahi, A. Gershman and G. B. Giannakis, “Joint Blind Channel and Carrier Frequency Offset Estimation in Orthogonally Space-Time Block Coded MIMO Systems,” *Proc. of Wrksp. on Signal Processing Advances in Wireless Com.*, New York City, NY, USA, June 5-8, 2005.
- [C353] X. Cai and G. B. Giannakis, “Detection of Differentially Expressed Genes Using Clustered Microarray Data,” *Proc. of IEEE Intl. Workshop on Genomic Signal Proc. and Statistics*, New Port, Rhode Island, May 22 - 24, 2005.
- [C354] A. Ribeiro, Y. Yu, G. B. Giannakis and N. D. Sidiropoulos, “Increasing the Throughput of Spread-Aloha Protocols via long PN Spreading Codes,” *Proc. of Intl. Conf. on Communications*, Seoul, Korea, May 16-20, 2005.
- [C355] A. Cano, X. Ma and G. B. Giannakis, “Block-Differential Modulation for Doubly-Selective Wireless Fading Channels,” *Proc. of Intl. Conf. on Communications*, Seoul, Korea, May 16-20, 2005.
- [C356] A. Ribeiro and G. B. Giannakis, “Distributed Quantization-Estimation Using Wireless Sensor Networks,” *Proc. of Intl. Conf. on Communications*, Seoul, Korea, May 16-20, 2005.
- [C357] Y. Yao and G. B. Giannakis, “Energy-Efficient Scheduling for Wireless Sensor Networks,” *Proc. of Intl. Conf. on Communications*, Seoul, Korea, May 16-20, 2005.
- [C358] X. Luo and G. B. Giannakis, “Blind Timing Acquisition for Ultra-Wideband Multi-User Ad Hoc Access,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Philadelphia, PA, USA, March 19-23, 2005.
- [C359] P. Xia, S. Zhou and G. B. Giannakis, “Achieving the Welch Bound with Difference Sets,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Philadelphia, PA, USA, March 19-23, 2005.
- [C360] ★ A. Ribeiro and G. B. Giannakis, “Non-Parametric Distributed Quantization-Estimation Using Wireless Sensor Networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Philadelphia, PA, USA, March 19-23, 2005.
- ★ **Received the Best Student Paper Award.**
- [C361] Q. Liu, S. Zhou, and G. B. Giannakis, “Predictable QoS-Guaranteed Scheduling for Wireless Networks,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Philadelphia, PA, USA, March 19-23, 2005.
- [C362] Y. Yu, A. Ribeiro, N. D. Sidiropoulos and G. B. Giannakis, “Cooperative Random Access with Long PN Spreading Codes,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, Philadelphia, PA, USA, March 19-23, 2005.
- [C363] Y. Yu and G. B. Giannakis, “Opportunistic Access in Slotted Aloha Adapted to Decentralized CSI,” *Proc. of GLOBECOM Conf.*, Dallas, TX, Nov. 29 - Dec. 3, 2004.

- [C364] Q. Liu, S. Zhou, and G. B. Giannakis, "Efficient Bandwidth Utilization Guaranteeing QoS over Adaptive Wireless Links," *Proc. of GLOBECOM Conf.*, Dallas, TX, Nov. 29 - Dec. 3, 2004.
- [C365] L. Yang and G. B. Giannakis, "Timing Synchronization of Ultra-Wideband Links with Dirty-Templates," *Proc. of 24th Army Science Conf.*, Orlando, FL, Nov. 29 - Dec. 2, 2004.
- [C366] Y. Yao and G. B. Giannakis, "Energy-Efficient TDMA for Wireless Sensor Fusion," *Proc. of 24th Army Science Conf.*, Orlando, FL, Nov. 29 - Dec. 2, 2004.
- [C367] X. Ma, J. Kleider, S. Gifford, G. B. Giannakis and B. Lu, "Iterative Decoding for Differential MIMO Systems with Near-Coherent Performance," *Proc. of Software Defined Radio Technical Conference*, Nov. 15-17, 2004.
- [C368] L. Yang and G. B. Giannakis, "Cross-Band Flexible UWB Access for High-Rate Multi-Piconet WPANs," *Proc. of 38th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 7-10, 2004.
- [C369] A. Ribeiro and G. B. Giannakis, "Distributed Estimation in Gaussian Noise for Bandwidth-Constrained Wireless Sensor Networks," *Proc. of 38th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 7-10, 2004.
- [C370] X. Luo and G. B. Giannakis, "Blind Timing and Channel Estimation for Ultra-Wideband Multi-User Ad Hoc Access," *Proc. of 38th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 7-10, 2004.
- [C371] Z. Tian and G. B. Giannakis, "Cross-Layer Sensor Network Synchronization," *Proc. of 38th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 7-10, 2004.
- [C372] Y. Yao and G. B. Giannakis, "Blind CFO Estimation for OFDMA-based Wireless Networks," *Proc. of MILCOM Conf.*, Monterey, CA, Oct. 31 - Nov. 3, 2004.
- [C373] L. Yang, G. B. Giannakis and A. Swami, "Non-Coherent UWB Demodulation with Dirty Templates," *Proc. of MILCOM Conf.*, Monterey, CA, Oct. 31 - Nov. 3, 2004.
- [C374] Q. Liu, S. Zhou, and G. B. Giannakis, "Cross-Layer Modeling of Adaptive Wireless Links for QoS Support in Multimedia Networks," *Proc. of 1st Intl. Conf. on QoS in Heterogeneous Wired/Wireless Networks*, Dallas, TX, Oct. 18-20, 2004.
- [C375] X. Luo and G. B. Giannakis, "Energy-Constrained Optimal Quantization for Wireless Sensor Networks," *Proc. of 1st Sensor and Ad Hoc Communications and Networks Conf.*, Santa Clara, CA, Oct. 4-7, 2004.
- [C376] Y. Yu and G. B. Giannakis, "Multiuser Diversity in Slotted Aloha Adapted to Decentralized CSI," *Proc. of 42nd Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, Sept. 29 - Oct. 1, 2004.
- [C377] P. Xia, and G. B. Giannakis, "Design and Analysis of Transmit-Beamforming based on Limited-Rate Feedback," *Proc. of the Vehicular Technology Conf.*, Los Angeles, CA, September 26-29, 2004.
- [C378] S. Shahbazpanahi, A. Gershman and G. B. Giannakis, "Semi-Blind MIMO Channel Estimation for Space-Time Coded Multi-User Systems," *Proc. of the 3rd Sensor Array and Multichannel SP Workshop*, Sitges, Barcelona, Spain, July 18-21, 2004.

- [C379] Y. Yao and G. B. Giannakis, “Blind CFO Estimation in OFDM Systems,” *Proc. of Signal Proc. Workshop on Advances in Wireless Communications*, Lisbon, Portugal, July 11-14, 2004.
- [C380] X. Wu, Z. Tian and G. B. Giannakis, “Orthogonal Waveform Design for UWB Radios,” *Proc. of Signal Proc. Workshop on Advances in Wireless Communications*, Lisbon, Portugal, July 11-14, 2004.
- [C381] X. Cai, G. B. Giannakis and M. Zoltowski, “Space-Time Spreading and Block Coding for Correlated Fading Channels in the Presence of Interference,” *Proc. of Signal Proc. Workshop on Advances in Wireless Communications*, Lisbon, Portugal, July 11-14, 2004.
- [C382] Y. Yao, X. Cai and G. B. Giannakis, “On Energy Efficiency of Relay Transmissions,” *Proc. of the Intl. Symp. on Info. Theory*, Chicago, IL, June 27 - July 2, 2004.
- [C383] Q. Liu, S. Zhou, and G. B. Giannakis, “TCP Performance in Wireless Access with Adaptive Modulation and Coding,” *Proc. of Intl. Conf. on Communications*, vol. 7, pp. 3989-3993, Paris, France, June 20-24, 2004.
- [C384] A. Ribeiro, X. Cai, and G. B. Giannakis, “Symbol Error Probabilities for General Cooperative Links,” *Proc. of Intl. Conf. on Communications*, vol. 6, pp. 3369-3373, Paris, France, June 20-24, 2004.
- [C385] S. Ohno, and G. B. Giannakis, “ML Sequence Estimation for Long ISI Channels with Controllable Complexity,” *Proc. of Intl. Conf. on Communications*, vol. 5, pp. 2782-2786, Paris, France, June 20-24, 2004.
- [C386] L. Rugini, P. Banelli, and G. B. Giannakis, “MMSE-Based Local ML Detection of Linearly Precoded OFDM Signals,” *Proc. of Intl. Conf. on Communications*, vol. 6, pp. 3270-3275, Paris, France, June 20-24, 2004.
- [C387] Z. Tian and G. B. Giannakis, “Training Sequence Design for Data-Aided Timing Acquisition in UWB Radios,” *Proc. of Intl. Conf. on Communications*, vol. 6, pp. 3399-3403, Paris, France, June 20-24, 2004.
- [C388] A. Ribeiro, X. Cai, and G. B. Giannakis, “Opportunistic Multipath for Bandwidth-Efficient Cooperative Networking,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, pp. 549-552, Montreal, Quebec, Canada, May 17-21, 2004.
- [C389] L. Yang, and G. B. Giannakis, “Blind UWB Timing with a Dirty Template,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, pp. 509-512, Montreal, Quebec, Canada, May 17-21, 2004.
- [C390] Y. Yao, and G. B. Giannakis, “On Regularity and Identifiability of Blind Source Separation under Constant Modulus Constraints,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, pp. 449-452, Montreal, Quebec, Canada, May 17-21, 2004.
- [C391] L. Yang, X. Ma, and G. B. Giannakis, “Optimal Training for Doubly-Selective MIMO Fading Channels,” *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 3, pp. 821-824, Montreal, Quebec, Canada, May 17-21, 2004.

- [C392] X. Wu, Z. Tian, T. N. Davidson, and G. B. Giannakis, "Optimal Waveform Design for UWB Radios," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, pp. 521-524, Montreal, Quebec, Canada, May 17-21, 2004.
- [C393] Y. Yu, X. Cai and G. B. Giannakis, "On the Instability of Slotted Aloha with Capture," *Proc. of Wireless Comm. and Networking Conf.*, vol. 2, pp. 728-732, Atlanta, GA, March 21-25, 2004.
- [C394] R. Wang, and G. B. Giannakis, "Approaching MIMO Capacity with Reduced-Complexity Soft Sphere-Decoding," *Proc. of Wireless Comm. and Networking Conf.*, vol. 3, pp. 1620-1625, Atlanta, GA, March 21-25, 2004.
- [C395] W. Zhao, and G. B. Giannakis, "Sphere-Decoding Algorithms with Improved Radius Search," *Proc. of Wireless Comm. and Networking Conf.*, vol. 4, pp. 2290-2294, Atlanta, GA, March 21-25, 2004.
- [C396] S. Zhou, Z. Wang and G. B. Giannakis, "Performance Analysis of Transmit-Beamforming with Finite-Rate Feedback," *Proc. of 38th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 17-19, 2004.
- [C397] X. Cai, Y. Yao, and G. B. Giannakis, "Achievable Rates for Low-Power Relayed Transmissions over Fading Channels," *Proc. of 38th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 17-19, 2004.
- [C398] P. Xia, and G. B. Giannakis, "Optimizing Multi-Antenna Transmissions based on Channel-Amplitude Information," *Proc. of 38th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 17-19, 2004.
- [C399] W. Zhao, X. Cai and G. B. Giannakis, "An Efficient Maximum-Likelihood Decoding Algorithm for Linear Block Codes," *Proc. of 38th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 17-19, 2004.
- 2003**
- [C400] R. Wang, X. Ma, and G. B. Giannakis, "Improving Performance of Coded FDFR Multi-Antenna Systems with Turbo-Decoding," *Proc. of Intl. Symp. on Signal Proces. and Info. Technology*, pp. 306-309, Darmstadt, Germany, Dec. 14-17, 2003.
- [C401] M.-K. Oh, X. Ma, G. B. Giannakis, and D.-J. Park, "Hopping Pilots for Estimation of Frequency-Offset and Multi-Antenna Channels in MIMO OFDM," *Proc. of Globecom Conf.*, vol. 2, pp. 1084-1088, San Francisco, CA, December 1-5, 2003.
- [C402] Y. Yao, and G. B. Giannakis, "Rate-Maximizing Power Allocation in OFDM based on Partial Channel Knowledge," *Proc. of Globecom Conf.*, vol. 2, pp. 863-867, San Francisco, CA, December 1-5, 2003.
- [C403] L. Yang, and G. B. Giannakis, "Low-Complexity Training for Rapid Timing Acquisition in Ultra-Wideband Communications," *Proc. of Globecom Conf.*, vol. 2, pp. 769-773, San Francisco, CA, December 1-5, 2003.
- [C404] Z. Tian, and G. B. Giannakis, "BER Sensitivity to Mis-Timing in Correlation-based UWB Receivers," *Proc. of Globecom Conf.*, vol. 1, pp. 441-445, San Francisco, CA, December 1-5, 2003.

- [C405] L. Yang, and G. B. Giannakis, "Ultra-Wideband Multiple-Access: Unification and Narrowband Interference Analysis," *Proc. of Conf. on Ultra Wideband Systems and Technologies*, pp. 349-353, Reston, Virginia, November 16-19, 2003.
- [C406] X. Luo, L. Yang, and G. B. Giannakis, "Designing Optimal Pulse-Shapers for Ultra-Wideband Radios," *Proc. of Conf. on Ultra Wideband Systems and Technologies*, pp. 349-353, Reston, Virginia, November 16-19, 2003.
- [C407] L. Yang, and G. B. Giannakis, "Digital-Carrier Multi-Band User Codes for Baseband UWB Multiple Access," *Proc. of Conf. on Ultra Wideband Systems and Technologies*, pp. 334-338, Reston, Virginia, November 16-19, 2003.
- [C408] Z. Tian, and G. B. Giannakis, "Data-Aided ML Timing Acquisition in Ultra-Wideband Radios," *Proc. of Conf. on Ultra Wideband Systems and Technologies*, pp. 142-146, Reston, Virginia, November 16-19, 2003.
- [C409] M.-K. Oh, X. Ma, G. B. Giannakis, and D.-J. Park, "Cooperative Synchronization and Channel Estimation in Wireless Sensor Networks," *Proc. of 37th Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, pp. 238-242, Pacific Grove, CA, November 9-12, 2003.
- [C410] L. Yang, and G. B. Giannakis, "Unification of Ultra-Wideband Multiple Access Schemes and Comparison in the Presence of Interference," *Proc. of 37th Asilomar Conf. on Signals, Systems, and Computers*, vol. 2, pp. 1239-1243, Pacific Grove, CA, November 9-12, 2003.
- [C411] P. Xia, S. Zhou, and G. B. Giannakis, "Multi-Antenna Adaptive Modulation with Transmit-Beamforming based on Bandwidth-Constrained Feedback," *Proc. of 37th Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, pp. 187-191, Pacific Grove, CA, November 9-12, 2003.
- [C412] Q. Liu, S. Zhou, and G. B. Giannakis, "Queuing with Adaptive Modulation and Coding over Wireless Links," *Proc. of MILCOM Conf.*, vol. 1, pp. 717-722, Boston, MA, October 13-16, 2003 (invited).
- [C413] W. Zhao, and G. B. Giannakis, "Reduced Complexity Closest Point Algorithms for Random Lattices," *Proc. of 41st Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, October 1-3, 2003.
- [C414] X. Cai, and G. B. Giannakis, "Error Probability Minimizing Pilots for OFDM over Fading Channels," *Proc. of 6th Baiona Workshop on Signal Proc. in Communications*, Baiona, Spain, September 8-10, 2003.
- [C415] P. Xia, S. Zhou, and G. B. Giannakis, "Adaptive MIMO OFDM based on Partial Channel State Information," *Proc. of Signal Proc. Workshop on Advances in Wireless Communications*, pp. 551-555, Rome, Italy, June 15-18, 2003.
- [C416] Q. Liu, S. Zhou, and G. B. Giannakis, "Combining Adaptive Modulation and Coding with Truncated ARQ Enhances Throughput," *Proc. of Signal Proc. Workshop on Advances in Wireless Communications*, pp. 110-114, Rome, Italy, June 15-18, 2003.
- [C417] Z. Tian, and G. B. Giannakis, "BER Sensitivity to Mis-Timing in Ultr-Wideband Communications," *Proc. of Signal Proc. Workshop on Advances in Wireless Communications*, pp. 234-238, Rome, Italy, June 15-18, 2003.

- [C418] S. Zhou, and G. B. Giannakis, "Adaptive Modulation for Multi-Antenna Transmissions with Channel Mean Feedback," *Proc. of Intl. Conf. on Communications*, vol. 4, pp. 2281-2285, Anchorage, Alaska, May 11-15, 2003.
- [C419] X. Ma, B. Lu, and G. B. Giannakis, "Block Differential Encoding for Rapidly Fading Channels," *Proc. of Intl. Conf. on Communications*, vol. 5, pp. 3570-3574, Anchorage, Alaska, May 11-15, 2003.
- [C420] W. Zhao, G. Leus, and G. B. Giannakis, "Algebraic Design of Unitary Space-Time Constellations," *Proc. of Intl. Conf. on Communications*, vol. 5, pp. 3180 - 3184, Anchorage, Alaska, May 11-15, 2003.
- [C421] L. Yang, Z. Tian, and G. B. Giannakis, "Non-data aided timing acquisition of ultra-wideband transmissions using cyclostationarity," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, 121-124, Hong Kong, April 6-10, 2003.
- [C422] S. Ohno, and G. B. Giannakis, "Fixed fragment-size packet transmissions with distributed redundancy over multipath fading channels," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, pp. 177-180, Hong Kong, April 6-10, 2003.
- [C423] X. Cai, and G. B. Giannakis, "Differential Space-Time Modulation with Transmit-Beamforming for Correlated MIMO Fading Channels," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, pp. 25-28, Hong Kong, April 6-10, 2003.
- [C424] S. Zhou, and G. B. Giannakis, "How Accurate Channel Prediction Needs to be for Adaptive Modulation in Rayleigh MIMO Channels ?" *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, pp. 81-84, Hong Kong, April 6-10, 2003.
- [C425] B. Lu, X. Ma, and G. B. Giannakis, "Block Decision Feedback Differential Coding for Rapidly Fading Channels," *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 4, pp. 169-172, Hong Kong, April 6-10, 2003.
- [C426] S. Ohno, and G. B. Giannakis, "Blind Identification for Fixed Fragment-size Packet Transmissions with Distributed Redundancy over Multipath Fading Channels," *Proc. of 4th Intl. Symp. on Indep. Comp. Anal. & Blind Source Separation*, Nara, Japan, April 1-4, 2003.
- [C427] X. Cai, and G. B. Giannakis, "Adaptive PSAM Accounting for Channel Estimation and Prediction Errors," *Proc. of the 37th Conf. on Info. Sciences & Systems*, Baltimore, Maryland, March 12-14, 2003.
- [C428] Y. Xin, and G. B. Giannakis, "Generalizing Linear Real-Field Codes for Fading Channels," *Proc. of the 37th Conf. on Info. Sciences & Systems*, Baltimore, Maryland, March 12-14, 2003.
- [C429] W. Zhao, and G. B. Giannakis, "Low-Complexity Receivers for Space-Time Binary CPM," *Proc. of the 37th Conf. on Info. Sciences & Systems*, Baltimore, Maryland, March 12-14, 2003.
- [C430] Q. Liu, S. Zhou, and G. B. Giannakis, "Jointly Adaptive Modulation and Packet Retransmission over Block Fading Channels with Robustness to Feedback Latency," *Proc. of the 37th Conf. on Info. Sciences & Systems*, Baltimore, Maryland, March 12-14, 2003.

2002

- [C431] X. Ma, and G. B. Giannakis, "Iterative Decoding for Differential MIMO Systems and Comparisons with Training," *Proc. of the 37th Conf. on Info. Sciences & Systems*, Baltimore, Maryland, March 12-14, 2003.
- [C432] P. Xia, S. Zhou, and G. B. Giannakis, "MIMO OFDM with ST Coding and Beamforming Adapted to Partial Channel State Information," *Proc. of the 37th Conf. on Info. Sciences & Systems*, Baltimore, Maryland, March 12-14, 2003.
- [C433] P. Xia, S. Zhou, and G. B. Giannakis, "Bandwidth- and Power Efficient Multi-Carrier Multiple Access," *Proc. of Wireless Communications and Networking Conf.*, vol. 1, pp. 207-211, New Orleans, LA, March 16-20, 2003.
- [C434] X. Ma, and G. B. Giannakis, "Space-Time-Multipath Coding using Digital Phase Sweeping," *Proc. of GLOBECOM Conf.*, vol. 1, pp. 384-388, Taipei, Taiwan, R.O.C., Nov. 17-21, 2002.
- [C435] Z. Wang, and G. B. Giannakis, "What Determines Average and Outage Performance in Fading Channels?" *Proc. of GLOBECOM Conf.*, vol. 2, pp. 1192-1196, Taipei, Taiwan, R.O.C., Nov. 17-21, 2002.
- [C436] Z. Tian, L. Yang, and G. B. Giannakis, "Symbol Timing Estimation in Ultra-Wideband Communications," *Proc. of 36th Asilomar Conf. on Signals, Systems, and Computers*, vol. 2, pp. 1924-1928, Pacific Grove, CA, November 3-6, 2002.
- [C437] X. Cai, and G. B. Giannakis, "Low-Complexity ICI Suppression for OFDM over Time- and Frequency-Selective Rayleigh Fading Channels," *Proc. of 36th Asilomar Conf. on Signals, Systems, and Computers*, vol. 2, pp. 1822-1826, Pacific Grove, CA, November 3-6, 2002.
- [C438] L. Yang, and G. B. Giannakis, "Optimal Pilot Waveform Assisted Modulation for Ultra-Wideband Communications," *Proc. of 36th Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, pp. 733-737, Pacific Grove, CA, November 3-6, 2002.
- [C439] X. Ma, L. Yang, and G. B. Giannakis, "Optimal Training for Multi-antenna Time- and Frequency-Selective Fading Channels," *Proc. of 36th Asilomar Conf. on Signals, Systems, and Computers*, vol. 2, pp. 1107-1111, Pacific Grove, CA, November 3-6, 2002 (invited).
- [C440] X. Ma, and G. B. Giannakis, "Full-Rate Full-Diversity Space-Time Complex-Field Codes for Frequency- or Time-Selective Fading Channels," *Proc. of 36th Asilomar Conf. on Signals, Systems, and Computers*, vol. 2, pp. 1714-1718, Pacific Grove, CA, November 3-6, 2002 (invited).
- [C441] X. Cai, S. Zhou, and G. B. Giannakis, "Group-Orthogonal Multi-Carrier CDMA," *Proc. of MILCOM Conf.*, vol. 1, pp. 596-601, Anaheim, CA, October 7-10, 2002.
- [C442] Y. Larsen, G. Leus, and G. B. Giannakis, "Reduction of Peak-to-Average Power Ratio in Block Differential OFDM Systems," *Proc. of 5th Nordic Signal Proc. Symposium*, Norway, October 4-7, 2002.
- [C443] X. Ma, and G. B. Giannakis, "Maximum Diversity Space-Time Systems with Maximum Rate for Any Number of Antennas," *Proc. of 40th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, October 2-4, 2002.

- [C444] Z. Wang, and G. B. Giannakis, "Outage Mutual Information for MIMO Space-Time Channels," *Proc. of 40th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, October 2-4, 2002.
- [C445] L. Yang, and G. B. Giannakis, "Ultra-Wideband Pilot Waveform Design Optimizing Rate and Performance with RAKE Reception," *Proc. of Intl. Symposium on Advances in Wireless Communications*, pp. 43-44, Victoria, Canada, Sept. 23-24, 2002.
- [C446] Y. Xin, and G. B. Giannakis, "Layered Space-Time OFDM with High-Performance and High-Rate," *Proc. of XI European Sign. Proc. Conf.*, Toulouse, France, Sept. 3-6, 2002.
- [C447] P. Banelli, G. Leus, and G. B. Giannakis, "Bayesian Estimation of Clipped Gaussian Processes with Application to OFDM," *Proc. of XI European Sign. Proc. Conf.*, Toulouse, France, Sept. 3-6, 2002.
- [C448] X. Ma, and G. B. Giannakis, "Layered Space-Time Complex-Field Coding: Full-Diversity with Full-Rate, and Tradeoffs," *Proc. of the 2nd Sensor Array and Multichannel SP Workshop*, pp. 442-446, Rosslyn, VA, August 4-6, 2002.
- [C449] R. Wang, Z. Wang, and G. B. Giannakis, "Combining Galois with Complex Field Coding for High-Rate Space-Time Communications," *Proc. of the 2nd Sensor Array and Multichannel SP Workshop*, pp. 570-574, Rosslyn, VA, August 4-6, 2002.
- [C450] X. Ma, and G. B. Giannakis, "Space-Time Coding for Doubly-Selective Channels," *Proc. of Intl. Conf. on Circuits and Systems*, vol. III, pp. 647-650, Scottsdale, AZ, May 25-29, 2002 (invited).
- [C451] S. Zhou, P. Xia, G. Leus and G. B. Giannakis, "Chip-Interleaved Block-Spread CDMA for the downlink with inter-cell interference and soft hand-off," *Proc. of Intl. Conf. on Circuits and Systems*, vol. I, pp. 841-844, Scottsdale, AZ, May 25-29, 2002 (invited).
- [C452] L. Yang, and G. B. Giannakis, "Space-Time Coding for Impulse Radio," *Proc. of IEEE Conf. on Ultra Wideband Systems and Technologies*, pp. 235-240, Baltimore, MD, May 20-23, 2002 (invited).
- [C453] L. Yang, and G. B. Giannakis, "Impulse Radio with Resilience to Multi-Access and Multipath Interference," *Proc. of IEEE Conf. on Ultra Wideband Systems and Technologies*, pp. 277-282, Baltimore, MD, May 20-23, 2002 (invited).
- [C454] Z. Liu, Y. Xin, and G. B. Giannakis, "Space-Time-Frequency Coded OFDM with Sub-Carrier Grouping and Constellation Precoding," *Proc. of Intl. Conf. on ASSP*, vol. 3, pp. 2205-2208, Orlando, FL, May 13-17, 2002.
- [C455] G. Leus, P. Xia, S. Zhou, and G. B. Giannakis, "Chip-Interleaved Block-Spread CDMA or DS-CDMA for Cellular Dowlink?," *Proc. of Intl. Conf. on ASSP*, vol.3, pp.2305-2308, Orlando, FL, May 13-17, 2002.
- [C456] X. Ma, G. B. Giannakis, and S. Ohno, "Optimal Training for Block Transmissions over Doubly-Selective Fading Channels," *Proc. of Intl. Conf. on ASSP*, vol. 2, pp.1509-1512, Orlando, FL, May 13-17, 2002.
- [C457] S. Zhou, and G. B. Giannakis, "Optimal Transmitter Eigen-Beamforming and Space-Time Block Coding based on Channel Mean," *Proc. of Intl. Conf. on ASSP*, vol. 3, pp. 2853-2856, Orlando, FL, May 13-17, 2002.

- [C458] G. B. Giannakis, X. Ma, G. Leus, and S. Zhou, "Space-Time-Doppler Coding over Time-Selective Fading Channels with Maximum Diversity and Coding Gains," *Proc. of Intl. Conf. on ASSP*, vol. 3, pp. 2217-2220, Orlando, FL, May 13-17, 2002.
- [C459] S. Zhou, Z. Wang, N. Bapat, and G. B. Giannakis, "Turbo-Decoding of Unitary Precoded and Coded OFDM," *Proc. of Vehicular Tech. Conf.*, vol. 3, pp. 1237-1241, Birmingham, AL, May 4 - 9, 2002.
- [C460] Z. Liu, Y. Xin, and G. B. Giannakis, "Space-Time-Frequency Coding over Frequency-Selective Fading Channels," *Proc. of Vehicular Tech. Conf.*, vol. 1, pp.145-149, Birmingham, AL, May 4 - 9, 2002.
- [C461] L. Yang, and G. B. Giannakis, "Block-Spreading Codes for Impulse Radio Multiple Access through ISI Channels," *Proc. of Intl. Conf. on Communications*, vol. 2, pp. 807-811, New York City, N.Y., April 28-May 2, 2002.
- [C462] S. Zhou, and G. B. Giannakis, "Optimal Transmitter Eigen-Beamforming and Space-Time Block Coding based on Channel Correlations," *Proc. of Intl. Conf. on Communications*, vol. 1, pp. 553-557, New York City, N.Y., April 28-May 2, 2002.
- [C463] S. Ohno, P. Anghel, G. B. Giannakis, and Z.-Q. Luo, "Multi-Carrier Multiple Access is Sum-Rate Optimal for Block Transmissions over Circulant ISI Channels," *Proc. of Intl. Conf. on Communications*, vol. 3., pp. 1656-1660, New York City, N.Y., April 28-May 2, 2002.
- [C464] Z. Wang, X. Ma, and G. B. Giannakis, "Optimality of Single-Carrier Zero-Padded Block Transmissions," *Proc. of Wireless Communications and Networking Conf.*, vol. 2, pp. 660-664, Orlando, FL, March 17-21, 2002.
- [C465] S. Ohno and G. B. Giannakis, "Average-Rate Optimal PSAM Transmissions over Time-Selective Fading Channels," *Proc. of Wireless Communications and Networking Conf.*, vol. 1, pp. 374-378, Orlando, FL, March 17-21, 2002.
- [C466] X. Ma and G. B. Giannakis, "Maximum-Diversity Transmissions over Time-Selective Wireless Channels," *Proc. of Wireless Communications and Networking Conf.*, vol. 1, pp. 497-501, Orlando, FL, March 17-21, 2002.
- [C467] Y. Xin, Z. Liu, and G. B. Giannakis, "High-Rate Layered Space-Time Coding based on Constellation Precoding," *Proc. of Wireless Communications and Networking Conf.*, vol. 1, pp. 471-476, Orlando, FL, March 17-21, 2002.
- [C468] Y. Larsen, G. Leus, and G. B. Giannakis, "Constant-Modulus Block Differential Encoding for Frequency-Selective Channels," *Proc. of 36th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 20-22, 2002.
- [C469] G. Leus, W. Zhao, and G. B. Giannakis, and H. Delic, "Space-Time Coding for Frequency-Hopped FSK Systems," *Proc. of 36th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 20-22, 2002.
- [C470] Z. Wang, and G. B. Giannakis, "Bounding Rate and Performance of Differential Space-Time Codes using Integral Geometry Measures," *Proc. of 36th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 20-22, 2002.

2001

- [C471] Y. Xin, and G. B. Giannakis, “High-Rate Space-Time Layered OFDM,” *Proc. of 36th Conf. on Info. Sciences and Systems*, Princeton Univ., NJ, March 20-22, 2002.
- [C472] Z. Wang, S. Zhou, and G. B. Giannakis, “Joint Coded-Precoded OFDM with Low-Complexity Turbo-Decoding,” *Proc. of European Wireless Conf.*, pp. 648-654, Florence, Italy, February 25-28, 2002.
- [C473] Y. Xin, Z. Wang, and G. B. Giannakis, “Space-time constellation-rotating codes maximizing diversity and coding gains,” in *Proc. of GLOBECOM*, vol. 1, pp. 455-459, San Antonio, TX, November 25-29, 2001.
- [C474] S. Zhou and G. B. Giannakis, “Space-time coded transmissions with maximum diversity gains over frequency-selective multipath fading channels,” in *Proc. of GLOBECOM*, vol. 1, pp. 440-444, San Antonio, TX, November 25-29, 2001.
- [C475] G. Leus, S. Zhou, and G. B. Giannakis, “Multi-user spreading codes retaining orthogonality through unknown time- and frequency-selective fading,” in *Proc. of GLOBECOM*, vol. 1, pp. 259-263, San Antonio, TX, November 25-29, 2001.
- [C476] M. Ghogho, A. Swami, and G. B. Giannakis, “Optimized null-subcarrier selection for CFO estimation in OFDM over frequency-selective fading channels,” in *Proc. of GLOBECOM*, vol. 1, pp. 202-206, San Antonio, TX, November 25-29, 2001.
- [C477] A. Stamoulis, N. Sidiropoulos, and G. B. Giannakis, “Time-varying fair queuing scheduling for multi-code CDMA based on dynamic programming,” in *Proc. of GLOBECOM*, vol. 6, pp. 3504-3508, San Antonio, TX, November 25-29, 2001.
- [C478] X. Ma, and G. B. Giannakis, “Exploiting Cyclostationarity for Blind Frequency-Offset Estimation in OFDM,” in *Proc. of 35th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 4-7, 2001.
- [C479] G. Leus, S. Zhou, and G. B. Giannakis, “Orthogonal multi-user transceivers in the presence of unknown time- and frequency-selective fading,” in *Proc. of 35th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 4-7, 2001.
- [C480] Y. Xin, Z. Wang, and G. B. Giannakis, “Unitary Precoded OFDM with Maximum Multipath Diversity and Coding Gains,” in *Proc. of 35th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 4-7, 2001.
- [C481] Z. Liu and G. B. Giannakis, “Layered space-time coding design for high data rate transmissions,” in *Proc. of MILCOM Conf*, McLean, VA, October 28-31, 2001.
- [C482] X. Ma, and G. B. Giannakis, “On Identifiability and Performance of Null-Subcarrier based Frequency-Offset Estimators for OFDM,” in *Proc. of Intl. Conf. on Info., Comm., and Signal Processing*, Singapore, October 15-18, 2001.
- [C483] Z.-Q. Luo, T. N. Davidson, G. B. Giannakis, and K. M. Wong, “Transceiver Optimization for Multiple Access through ISI Channels,” in *Proc. of 39th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, October 3-5, 2001.

- [C484] X. Ma, and G. B. Giannakis, “Designing Maximum Multipath-Doppler Diversity Transmissions over Time- and Frequency-Selective Wireless Channels,” in *Proc. of 39th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, October 3-5, 2001.
- [C485] C. Tepedelenlioglu, and G. B. Giannakis, “Accurate Estimation of Shadow Fading Parameters,” in *Proc. of 39th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, October 3-5, 2001.
- [C486] Z. Liu, and G. B. Giannakis, “Block Differentially Encoded OFDM with Maximum Multipath Diversity,” in *Proc. of 39th Allerton Conf.*, Univ. of Illinois at U-C, Monticello, IL, October 3-5, 2001.
- [C487] G. B. Giannakis and X. Ma, “Linear Algebra tools for Wireless and Mobile Communications,” in *Proc. of 4th SIAM Conf. on Linear Algebra, Signals, Systems, and Controls*, Boston, MA, August 13-15, 2001.
- [C488] S. Zhou, B. Muquet, and G. B. Giannakis, “Semi-blind channel estimation for block precoded space-time ofdm transmissions,” in *Proc. of the 11th IEEE Workshop on Stat. Signal Proc.*, pp. 381-384, Singapore, August 6-8, 2001.
- [C489] E. G. Larsson, J. Li, G. Liu, and G. B. Giannakis, “An Algorithm For Joint Symbol Timing And Channel Estimation For OFDM Systems,” in *Proc. of the 11th IEEE Workshop on Stat. Signal Proc.*, pp. 393-396, Singapore, August 6-8, 2001.
- [C490] S. Ohno and G. B. Giannakis, “Capacity maximizing pilots for wireless ofdm over rapidly fading channels,” in *Proc. of Intl. Symp. on Signals, Systems and Electronics*, pp. 246-249, Tokyo, Japan, July 24-27, 2001.
- [C491] S. Ohno and G. B. Giannakis, “Superimposed training on redundant precoding for low-complexity recovery of block transmissions,” in *Proc. of Intl. Conf. on Communications*, vol. 5, pp. 1521-1525, Helsinki, Finland, June 11-15, 2001.
- [C492] S. Barbarossa, M. Pompili, and G. B. Giannakis, “Time and frequency synchronization of orthogonal frequency division multiple access systems,” in *Proc. of Intl. Conf. on Communications*, vol. 6, pp. 1674-1678, Helsinki, Finland, June 11-15, 2001.
- [C493] X. Ma, G. B. Giannakis, and S. Barbarossa, “Non-data aided frequency-offset and channel estimation in ofdm and related block transmissions,” in *Proc. of Intl. Conf. on Communications*, vol. 6, pp. 1866-1870, Helsinki, Finland, June 11-15, 2001.
- [C494] S. Zhou, G. B. Giannakis, and A. Swami, “Comparison of digital multi-carrier direct-sequence spread spectrum in the presence of multipath,” in *Proc. of Intl. Conf. on ASSP*, vol. 4, pp. 2225-2228, Salt Lake City, Utah, May 7-11, 2001.
- [C495] M. Pompili, S. Barbarossa, and G. B. Giannakis, “Channel-independent non-data aided synchronization of generalized multiuser ofdm,” in *Proc. of Intl. Conf. on ASSP*, vol. 4, pp. 2341-2344, Salt Lake City, Utah, May 7-11, 2001.
- [C496] S. Ohno and G. B. Giannakis, “Optimal training and redundant precoding for block transmissions with application to wireless ofdm,” in *Proc. of Intl. Conf. on ASSP*, vol. 4, pp. 2389-2392, Salt Lake City, Utah, May 7-11, 2001.

- [C497] Y. Xin, Z. Wang, and G. B. Giannakis, "Space-time diversity systems based on unitary constellation-rotating precoders," in *Proc. of Intl. Conf. on ASSP*, vol. 4, pp. 2429-2432, Salt Lake City, Utah, May 7-11, 2001.
- [C498] C. Tepedelenlioglu, A. Abdi, G. B. Giannakis, and M. Kaveh, "Performance analysis of moment-based estimators for the k-parameter of the rice fading distribution," in *Proc. of Intl. Conf. on ASSP*, vol. 4, pp. 2521-2524, Salt Lake City, Utah, May 7-11, 2001.
- [C499] S. Zhou, G. B. Giannakis, and A. Swami, "Digital multi-carrier spread-spectrum for resistance against jamming and multipath," in *Proc. of SPIE*, Orlando, FL, April 2001.
- [C500] S. Zhou and G. B. Giannakis, "Chip-interleaved block-spread cdma," in *Proc. of 35th Conf. on Info. Sciences and Systems*, The Johns Hopkins Univ., Baltimore, March 21-23, 2001.
- [C501] X. Ma and G. B. Giannakis, "Robustifying ofdm against frequency-offsets using space-time block coding," in *Proc. of 35th Conf. on Info. Sciences and Systems*, The Johns Hopkins Univ., Baltimore, March 21-23, 2001.
- [C502] S. Ohno and G. B. Giannakis, "Universal redundant precoders for guaranteed recovery of block transmissions through unknown fir channels,," in *Proc. of 3rd IEEE Workshop on Signal Processing Advances in Wireless Communications*, Taoyuan, Taiwan, pp. 279–282, March 20-23, 2001.
- [C503] Z. Wang and G. B. Giannakis, "Linearly precoded or coded ofdm against wireless channel fades?," in *Proc. of 3rd IEEE Workshop on Signal Processing Advances in Wireless Communications*, Taoyuan, Taiwan, pp. 267–270, March 20-23, 2001.
- [C504] C. Tepedelenlioglu, N. Sidiropoulos, and G. B. Giannakis, "Median filtering for power estimation in mobile communication systems," in *Proc. of 3rd IEEE Workshop on Signal Processing Advances in Wireless Communications*, Taoyuan, Taiwan, pp. 229–231, March 20-23, 2001.
- [C505] X. Ma, C. Tepedelenlioglu, and G. B. Giannakis, "Consistent blind synchronization of ofdm transmissions using null subcarriers with distinct spacings,," in *Proc. of 3rd IEEE Workshop on Signal Processing Advances in Wireless Communications*, Taoyuan, Taiwan, pp. 146–149, March 20-23, 2001.
- 2000**
- [C506] G. B. Giannakis and S. Zhou, "Optimal transmit-diversity precoders for random fading channels," in *Proc. of GLOBECOM*, vol. 3, San Francisco, CA, pp. 1839–1843, Nov. 27 - Dec. 1, 2000.
- [C507] A. Stamoulis and G. B. Giannakis, "Deterministic time-varying packet fair queueing for integrated services networks," in *Proc. of GLOBECOM*, vol. 1, San Francisco, CA, pp. 621–625, Nov. 27 - Dec. 1, 2000.
- [C508] C. L. Martret and G. B. Giannakis, "All-digital pam impulse radio for multi-user communications through multipath,," in *Proc. of GLOBECOM*, vol. 1, San Francisco, CA, pp. 77–81, Nov. 27 - Dec. 1, 2000.
- [C509] B. Muquet, S. Zhou, and G. B. Giannakis, "Subspace-based estimation of frequency-selective channels for space-time block precoded transmissions," in *Proc. of 34th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 975–979, Oct. 29-Nov. 1, 2000.

- [C510] Y. Xin, Z. Wang, and G. B. Giannakis, "Linear unitary precoders for maximum diversity gains with multiple transmit- and receive-antennas," in *Proc. of 34th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1553–1557, Oct. 29–Nov. 1, 2000.
- [C511] Z. Liu, A. Stamoulis, and G. B. Giannakis, "Supporting integrated services in wireless networks with space-time block-coded transmissions," in *Proc. of 34th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1250–1254, Oct. 29–Nov. 1, 2000.
- [C512] B. Muquet, P. Magniez, P. Duhamel, M. de Courville, and G. B. Giannakis, "Turbo demodulation of zero-padded ofdm transmissions," in *Proc. of 34th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1815–1819, Oct. 29–Nov. 1, 2000.
- [C513] Z. Liu, X. Ma, and G. B. Giannakis, "Space-time coding and kalman filtering for diversity transmissions through time-selective fading channels," in *Proc. of MILCOM Conf.*, Los Angeles, CA, Oct. 22–25, 2000.
- [C514] S. Zhou, G. B. Giannakis, and A. Swami, "Frequency-hopped generalized mc-cdma for multipath and interference suppression," in *Proc. of MILCOM Conf.*, vol. 2, LA, CA, pp. 937–941, October 2000.
- [C515] C. L. Martret and G. B. Giannakis, "All-digital impulse radio for mui/isi-resilient transmissions through frequency-selective multipath channels," in *Proc. of MILCOM Conf.*, Los Angeles, CA, October 2000.
- [C516] S. Zhou, G. B. Giannakis, and C. L. Martret, "Low-complexity bandwidth-efficient mui/isi-resilient cdma based on block-spreading," in *Proc. of 38th Allerton Conf.*, vol. 1, Univ. of Illinois at U-C, Monticello, IL, pp. 52–61, October 2000.
- [C517] A. Stamoulis, Z. Liu, and G. B. Giannakis, "Space-time coded generalized multicarrier cdma with block-spreading for multirate services," in *Proc. of 38th Allerton Conf.*, vol. 2, Univ. of Illinois at U-C, Monticello, IL, pp. 1076–1085, October 2000.
- [C518] S. Alouini, A. Scaglione, and G. B. Giannakis, "Pcc - principal components combining for dense correlated multipath environments," in *Proc. of Vehicular Technology Conf.*, vol. 5, Boston, MA, pp. 2510–2517, September 2000.
- [C519] A. Scaglione, S. Barbarossa, and G. B. Giannakis, "Optimal adaptive precoding for frequency-selective nagakami-m fading channels," in *Proc. of Vehicular Technology Conf.*, vol. 3, Boston, MA, pp. 1291–1295, September 2000.
- [C520] A. Stamoulis and G. B. Giannakis, "Multi-user decision-feedback equalization of block-spread multirate transmissions for qos wireless networking," in *Proc. of Wireless Communications and Networking Conf.*, Chicago, IL, September 2000.
- [C521] C. Tepedelenlioglu and G. B. Giannakis, "A spectral moment approach to velocity estimation in mobile communications," in *Proc. of Wireless Communications and Networking Conf.*, Chicago, IL, September 2000.
- [C522] Z. Liu, G. B. Giannakis, and B. L. Hughes, "Double differential space-time block coding for time-selective fading channels," in *Proc. of Wireless Communications and Networking Conf.*, Chicago, IL, pp. 13–17, September 2000.

- [C523] S. Zhou and G. B. Giannakis, “Generalized frequency hopping ofdma through unknown frequency-selective multipath channels,” in *Proc. of Wireless Communications and Networking Conf.*, Chicago, IL, September 2000.
- [C524] P. Ciblat, E. S. P. Loubaton, and G. B. Giannakis, “Cyclic correlation based symbol estimation: Asymptotic analysis,” in *Proc. of EUSIPCO*, Tampere, Finland, September 2000.
- [C525] E. Serpedin, G. B. G. P. Ciblat, and P. Loubaton, “Performance analysis of blind carrier phase estimators for general qam constellations,” in *Proc. of 10th IEEE Work. on Statistical Signal and Array Proc.*, Pocono Manor, Pennsylvania, pp. 171–175, August 2000.
- [C526] B. Muquet, M. de Courville, P. Duhamel, and G. B. Giannakis, “Ofdm with trailing zeros versus ofdm with cyclic prefix: Links, comparisons and application to the hiperlan/2 system,” in *Proc. of IEEE ICC*, New Orleans, LA, pp. 1049–1053, June 2000.
- [C527] Z. Wang and G. B. Giannakis, “Block spreading for mui/isi-resilient generalized multicarrier cdma with multirate capabilities,” in *Proc. of IEEE ICC*, New Orleans, LA, pp. 1477–1481, June 2000.
- [C528] B. Muquet, M. de Courville, G. B. Giannakis, Z. Wang, and P. Duhamel, “Reduced complexity equalizers for zero-padded ofdm transmissions,” in *Proc. of Intl. Conf. on ASSP*, vol. 5, Istanbul, Turkey, pp. 2973–2976, June 2000.
- [C529] A. Scaglione, S. Barbarossa, and G. B. Giannakis, “Robust ofdm transmissions over frequency-selective channels with multiplicative time-selective effects,” in *Proc. of Intl. Conf. on ASSP*, vol. 5, Istanbul, Turkey, pp. 2677–2680, June 2000.
- [C530] P. Ciblat, E. S. P. Loubaton, and G. B. Giannakis, “Performance of non-data aided carrier offset estimation for non-circular transmissions through frequency-selective channels,” in *Proc. of Intl. Conf. on ASSP*, vol. 5, Istanbul, Turkey, pp. 2525–2528, June 2000.
- [C531] G. B. Giannakis, P. Anghel, and Z. Wang, “Wideband generalized multi-carrier cdma over frequency-selective wireless channels,” in *Proc. of Intl. Conf. on Acoust. Speech and Signal Proc.*, Istanbul, Turkey, pp. 2501–2504, June 2000.
- [C532] D. Declercq and G. B. Giannakis, “Recovering clipped ofdm blocks with bayesian inference,” in *Proc. of Intl. Conf. on Acoust. Speech and Signal Proc.*, vol. 1, Istanbul, Turkey, pp. 157–160, June 2000.
- [C533] C. L. Martret and G. B. Giannakis, “All-digital impulse radio for multi-user communications through multipath,” in *Proc. of the 1st Sensor Array and Multichannel SP Workshop*, Boston, MA, pp. 22–26, March 2000.
- [C534] A. Stamoulis and G. B. Giannakis, “Packet fair queueing scheduling based on multirate multipath-transparent cdma for wireless networking,” in *Proc. of INFOCOM*, Tel Aviv, Israel, pp. 1067–1076, March 2000.
- [C535] Z. Liu and G. B. Giannakis, “Space-time coding with transmit antennas for multiple access regardless of frequency-selective multipath,” in *Proc. of the 1st Sensor Array and Multichannel SP Workshop*, Boston, MA, pp. 178–182, March 2000.

- [C536] T. Li and G. B. G. N. D. Sidiropoulos, “Parafac stap for the uesa radar,” in *Proc. of 8th Wrksp. on Adaptive Sensor Array Processing*, Boston, MA, March 2000.
- [C537] C. Tepedelenlioglu and G. B. Giannakis, “Effects of non-isotropic scattering on the correlation properties of mobile fading channels,” in *Proc. of 34th Conf. on Info. Sciences and Systems (CISS’00)*, Princeton Univ., Princeton, NJ, March 2000.
- [C538] A. Stamoulis and G. B. Giannakis, “Provision of qos in wireless networks based on multirate multipath-transparent space-time block coding,” in *Proc. of 34th Conf. on Info. Sciences and Systems (CISS’00)*, Princeton Univ., Princeton, NJ, March 2000.
- [C539] S. Zhou and G. B. Giannakis, “Finite-alphabet based channel estimation for ofdm and related multi-carrier systems,” in *Proc. of 34th Conf. on Info. Sciences and Systems (CISS’00)*, Princeton Univ., Princeton, NJ, March 2000.
- 1999**
- [C540] G. B. Giannakis, Z. Wang, A. Scaglione, and S. Barbarossa, “Amour - generalized multicarrier cdma irrespective of multipath,” in *Proc. of GLOBECOM*, Rio de Janeiro, Brazil, pp. 965–969, December 1999.
- [C541] A. Stamoulis, W. Tang, and G. B. Giannakis, “Information rate maximizing fir transceivers: Filterbank precoders and decision-feedback equalizers for block transmissions over dispersive channels,” in *Proc. of GLOBECOM*, Rio de Janeiro, Brazil, pp. 2142–2146, December 1999.
- [C542] Z. Liu, G. B. Giannakis, A. Scaglione, and S. Barbarossa, “Block precoding and transmit-antenna diversity for decoding and equalization of unknown multipath channels,” in *Proc. of 33rd Asilomar Conf. on Signals, Systems, and Computers*, vol. 2, Pacific Grove, CA, pp. 1557–1561, November 1999.
- [C543] G. T. Zhou, Y. Kim, and G. B. Giannakis, “Estimation and equalization of time-selective channels using precoding,” in *Proc. of 33rd Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, Pacific Grove, CA, pp. 248–252, November 1999.
- [C544] Z. Liu, A. Scaglione, S. Barbarossa, and G. B. Giannakis, “Block space-time antenna precoding/decoding for generalized multicarrier communications in unknown multipath,” in *Proc. of 37th Annual Allerton Conf. on Communication, Control, and Computing*, Univ. of Illinois at U-C, Monticello, Il, pp. 1016–1025, September 1999.
- [C545] C. Tepedelenlioglu and G. B. Giannakis, “Precoding for scattering function estimation of mobile channels using output correlations only,” in *Proc. of 37th Annual Allerton Conf. on Communication, Control, and Computing*, Univ. of Illinois at U-C, Monticello, Il, pp. 770–779, September 1999.
- [C546] A. Scaglione, G. B. Giannakis, and S. Barbarossa, “Minimum redundancy filterbank precoders for blind channel identification irrespective of channel nulls,” in *Proc. of IEEE Wireless Comm. and Networking Conference (WCNC’99)*, New Orleans, LA, pp. 785–789, September 1999.
- [C547] G. B. Giannakis, P. A. Anghel, Z. Wang, and A. Scaglione, “Generalized multi-carrier cdma for mui/isi-resilient uplink transmissions irrespective of frequency-selective multipath,” in *Second International Workshop on Multi-Carrier Spread-Spectrum & Related Topics*, Oberpfaffenhofen, Germany, pp. 25–33, September 1999.

- [C548] A. Scaglione, Y. Lin, and G. B. Giannakis, “Block redundant constant modulus equalization for fir channel irrespective blind identifiability,” in *IEEE-EURASIP Workshop on Nonlinear Signal and Image Proc.*, vol. 2, Antalya, Turkey, pp. 694–698, June 1999.
- [C549] Z. Wang, A. Scaglione, G. B. Giannakis, and S. Barbarossa, “Vandermonde-la grange mutually orthogonal flexible transceivers for blind cdma in unknown multipath,” in *Proc. of IEEE-SP Workshop on Signal Proc. Advances in Wireless Comm. (SPAWC’99)*, Annapolis, MD, pp. 42–45, May 1999.
- [C550] S. Barbarossa, A. Scaglione, and G. B. Giannakis, “Performance analysis of redundant filterbank precoders with blind channel estimation capability,” in *Proc. of IEEE-SP Workshop on Signal Proc. Advances in Wireless Comm. (SPAWC’99)*, Annapolis, MD, pp. 378–381, May 1999.
- [C551] C. Tepedelenlioglu, “Deterministic blind estimation of time- and frequency-selective fading channels using filterbank precoders,” in *Proc. of IEEE-SP Workshop on Signal Proc. Advances in Wireless Comm. (SPAWC’99)*, Annapolis, MD, pp. 74–77, May 1999.
- [C552] A. Stamoulis, G. B. Giannakis, and A. Scaglione, “Self-recovering transceivers for block transmissions: Filterbank precoders and decision-feedback equalizers,” in *Proc. of IEEE-SP Workshop on Signal Proc. Advances in Wireless Comm. (SPAWC’99)*, Annapolis, MD, pp. 243–246, May 1999.
- [C553] A. Kambanellas and G. B. Giannakis, “Modulo pre-equalization of nonlinear communication channels,” in *Proc. of IEEE-SP Workshop on Signal Proc. Advances in Wireless Comm. (SPAWC’99)*, Annapolis, MD, pp. 46–49, May 1999.
- [C554] G. B. Giannakis, Z. Wang, and S. B. A. Scaglione, “Mutually orthogonal transceivers for blind uplink cdma irrespective of multipath channel nulls,” in *Proc. of Intl. Conf. on Acoust. Speech and Signal Proc.*, vol. 5, Phoenix, AZ, pp. 2741–2744, March 1999.
- [C555] E. Serpedin, A. Chevreuil, G. B. Giannakis, and P. Loubaton, “Non-data aided joint estimation of carrier frequency offset and channel using periodic modulation precoders: Performance analysis,” in *Proc. of Intl. Conf. on Acoust. Speech and Signal Proc.*, vol. 5, Phoenix, AZ, March 1999.
- [C556] A. Scaglione, S. Barbarossa, and G. B. Giannakis, “Fading-resistant and mui-free codes for cdma systems,” in *Proc. of Intl. Conf. on Acoust. Speech and Signal Proc.*, vol. 5, Phoenix, AZ, pp. 2687–2690, March 1999.
- [C557] R. Bro, N. Sidiropoulos, and G. B. Giannakis, “A fast least squares algorithm for separating trilinear mixtures,” in *Proc. ICA99-Int. Workshop on Independent Component Analysis for Blind Signal Separation*, Aussois, France, pp. 289–294, January 1999.
- [C558] A. Scaglione, S. Barbarossa, and G. B. Giannakis, “Transmit-filterbanks optimizing information rate in block transmissions over dispersive channels,” in *Proc. of Globecom*, vol. 6, Sydney, Australia, pp. 3651–3656, November 1998.
- [C559] R. Bro, N. D. Sidiropoulos, and G. B. Giannakis, “Optimal joint azimuth-elevation and signal-array response estimation using parallel factor analysis,” in *Proc. of 32nd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1594–1598, November 1998.
- [C560] C. Tepedelenlioglu and G. B. Giannakis, “Blind estimation and equalization of time- and frequency-selective channels using filterbank precoders,” in *Proc. of 32nd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1138–1142, November 1998.

- [C561] A. Scaglione, S. Barbarossa, and G. B. Giannakis, “Inverting overdetermined toeplitz matrices with application to channel equalization in block transmission systems,” in *Proc. of 32nd Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1134–1137, November 1998.
- [C562] O. Besson, G. B. Giannakis, and F. Gini, “Fast and accurate estimation of hyperbolic frequency modulated chirp signals,” in *Proc. of 4th IEEE Intl. Conf. on Signal Proc. (ICSP’98)*, Beijing, China, pp. 148–151, October 1998.
- [C563] N. Sidiropoulos, G. Giannakis, and R. Bro, “Deterministic waveform-preserving blind separation of ds-cdma signals using an antenna array,” in *Proc. of IEEE SP Workshop on Statist. Signal and Array Proc. (SSAP’98)*, Portland, Oregon, pp. 304–307, September 1998.
- [C564] E. Serpedin, G. B. Giannakis, A. Chevreuil, and P. Loubaton, “Blind channel and carrier frequency-offset estimation using periodic modulation precoders,” in *Proc. of IEEE SP Workshop on Statist. Signal and Array Proc. (SSAP’98)*, Portland, Oregon, pp. 288–291, September 1998.
- [C565] A. Scaglione, S. Barbarossa, and G. B. Giannakis, “Self-recovering equalization of time-selective fading channels using redundant filterbank precoders,” in *Proc. of Digital Signal Proc. Workshop*, Bryce Canyon, Utah, August 1998.
- [C566] A. Scaglione, G. B. Giannakis, and S. Barbarossa, “Redundant filterbank precoders and equalizers: Unification and optimal designs,” in *Proc. of Intl. Conf. on Communications*, vol. 1, Atlanta, GA, pp. 21–25, June 1998.
- [C567] A. Scaglione, G. B. Giannakis, and S. Barbarossa, “Self-recovering multirate equalizers using redundant filter bank precoders,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’98)*, vol. 6, Seattle, WA, pp. 3501–3504, May 1998.
- [C568] A. Chevreuil, E. Serpedin, P. Loubaton, and G. B. Giannakis, “Performance analysis of blind channel estimators based on non-redundant periodic modulation precoders,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’98)*, vol. 6, Seattle, WA, pp. 3397–3400, May 1998.
- [C569] A. Scaglione, S. Barbarossa, and G. B. Giannakis, “Optimal fir redundant filterbank precoders and equalizers maximizing information rate in block transmissions over frequency-selective channels,” in *Proc. of 32nd Conf. on Info. Sciences and Systems (CISS’98)*, Princeton Univ., Princeton, NJ, March 1998.
- [C570] C. Tepedelenlioglu and G. B. Giannakis, “Blind identification and equalization of rapidly fading wireless channels using two antennas,” in *Proc. of Wirelles Com. Workshop*, San Diego, CA, pp. 138–143, March 1998.
- 1997**
- [C571] E. Serpedin and G. B. Giannakis, “Blind identification of arma models with periodically encoded inputs,” in *Proc. of 31st Asilomar Conf. on Signals, Systems, and Computers*, vol. 2, Pacific Grove, CA, pp. 1633–1637, November 1997.
- [C572] A. Scaglione and G. B. Giannakis, “Code-only dependent asynchronous cdma receivers for mui elimination and mitigation of unknown multipath,” in *Proc. of 31st Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, Pacific Grove, CA, pp. 950–954, November 1997.

- [C573] F. Gini and G. B. Giannakis, "Parameter estimation of hybrid hyperbolic fm and polynomial phase signals using the multi-lag high-order ambiguity function," in *Proc. of 31st Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, Pacific Grove, CA, pp. 250–254, November 1997.
- [C574] A. Scaglione, G. B. Giannakis, and S. Barbarossa, "Redundant Filterbank Precoders and Equalizers: Optimal Designs and Blind Recovery," in *Proc. of 35th Annual Allerton Conf. on Communication, Control, and Computing*, Univ. of Illinois at UC, Monticello, IL, pp. 385–394, September 1997.
- [C575] G. B. Giannakis and A. Scaglione, "Designing user codes for mui elimination and unknown multi-path mitigation in asynchronous cdma systems," in *Proc. of 35th Annual Allerton Conf. on Communication, Control, and Computing*, Univ. of Illinois at UC, Monticello, IL, pp. 729–738, September 1997.
- [C576] F. Gini and G. B. Giannakis, "Hybrid fm-polynomial phase signal modeling: Parameter estimation and performance analysis," in *IEEE Signal Processing Workshop on Higher-Order Statistics*, Banff, Alberta, Canada, pp. 21–23, July 21-23 1997.
- [C577] R. W. H. Jr. and G. B. Giannakis, "Blind channel identification for multirate precoding and ofdm systems," in *13th International Conference on Digital Signal Processing*, vol. 1, Santorini, Greece, pp. 383–386, July 2-4 1997.
- [C578] G. B. Giannakis and E. Serpedin, "Blind channel identification with modulation induced cyclostationarity," in *13th International Conference on Digital Signal Processing*, vol. 1, Santorini, Greece, pp. 111–114, July 2-4 1997.
- [C579] G. B. Giannakis, C. Tepedelenlioglu, and H. Liu, "Adaptive blind equalization of time-varying channels," in *Proc. of Intl. Conf. on ASSP*, vol. 5, Munich, Germany, pp. 4033–4036, April 20-24 1997.
- [C580] M. K. Tsatsanis and G. B. Giannakis, "Cyclostationarity in partial response signaling: A novel framework for blind equalization," in *Proc. of Intl. Conf. on ASSP*, vol. 5, Munich, Germany, pp. 3597–3600, April 20-24 1997.
- [C581] F. Gini and G. B. Giannakis, "Frequency offset and timing estimation in slowly-varying fading channels: A cyclostationary approach," in *Proc. of 1st IEEE Signal Processing Workshop on Wireless Communications*, Paris, France, pp. 393–396, April 16-18 1997.
- [C582] G. T. Zhou and G. B. Giannakis, "Nonlinear channel identification and performance analysis with psk inputs," in *Proc. of 1st IEEE Signal Processing Workshop on Wireless Communications*, Paris, France, pp. 337–340, April 16-18 1997.
- [C583] F. Gini and G. B. Giannakis, "Generalized differential encoding: A nonlinear signal processing framework," in *Proc. of 1st IEEE Signal Processing Workshop on Wireless Communications*, Paris, France, pp. 153–156, April 16-18 1997.
- [C584] S. D. Halford and G. B. Giannakis, "Direct blind equalization for transmitter induced cyclostationarity," in *Proc. of 1st IEEE Signal Processing Workshop on Wireless Communications*, Paris, France, pp. 117–120, April 16-18 1997.
- [C585] E. Serpedin and G. B. Giannakis, "Blind channel identification and equalization with modulation induced cyclostationarity," in *Proc. of 31st Conf. on Info.Sciences and Systems (CISS'97)*, vol. 2, The Johns Hopkins Univ., Baltimore, pp. 792–797, March 19-21 1997.

1996

- [C586] G. B. Giannakis and R. W. H. Jr., “Multirate precoding for blind channel equalization in ofdm,” in *Proc. of 31st Conf. on Info. Sciences and Systems (CISS’97)*, vol. 2, The Johns Hopkins Univ., Baltimore, pp. 769–774, March 19-21 1997.
- [C587] R. W. H. Jr., S. D. Halford, and G. B. Giannakis, “Adaptive blind channel identification of fir channels for viterbi decoding,” in *Proc. of 30th Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, Pacific Grove, CA, pp. 320–324, November 3-6 1996.
- [C588] E. Serpedin and G. B. Giannakis, “On blind equalization of multiple fir volterra channels,” in *Proc. of 30th Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, Pacific Grove, CA, pp. 315–319, November 3-6 1996.
- [C589] G. B. Giannakis and C. Tepedelenlioglu, “Batch and adaptive direct blind equalizers of multiple fir channels: A deterministic approach,” in *Proc. of 30th Asilomar Conf. on Signals, Systems, and Computers*, vol. 1, Pacific Grove, CA, pp. 290–294, November 3-6, 1996.
- [C590] G. B. Giannakis and R. W. Heath, “Blind identification of multichannel fir blurs and perfect image restoration,” in *Proc. of Intl. Conf. on Image Processing*, vol. 1, Lausanne, Switzerland, pp. 717–720, September 16-19 1996.
- [C591] G. B. Giannakis and E. Serpedin, “Blind equalizers of multichannel linear-quadratic fir volterra channels,” in *Proc. of 8th SP Wrksp. on Statistical Signal and Array Proces.*, Corfu, Greece, pp. 371–374, June 24-26, 1996.
- [C592] G. B. Giannakis, “Blind equalization of time-varying channels: A deterministic multichannel approach,” in *Proc. of 8th SP Wrksp. on Statistical Signal and Array Proces.*, Corfu, Greece, pp. 180–183, June 24-26, 1996.
- [C593] J. Yuan and G. B. Giannakis, “Product multilag high-order ambiguity function for blind equalization of polynomial phase signals,” in *Proc. of Intl. Symp. of Time-Frequency and Time-Scale Analysis*, Paris, France, pp. 529–532, June 18-21, 1996.
- [C594] A. Porchia, S. Barbarossa, A. Scaglione, and G. B. Giannakis, “Autofocusing techniques for sar imaging using the multi-lag high-order ambiguity function,” in *Proc. of Intl. Conf. on ASSP*, vol. 4, Atlanta, GA, pp. 2086–2089, May 7-11, 1996.
- [C595] M. K. Tsatsanis, G. B. Giannakis, and G. Zhou, “Equalization of fading channels with random coefficients,” in *Proc. of Intl. Conf. on ASSP*, vol. 2, Atlanta, GA, May 7-11, 1996.
- [C596] T. J. Endres, S. D. Halford, C. R. J. Jr., and G. B. Giannakis, “Blind adaptive channel equalization using fractionally spaced received signal second-order statistics: A comparative study,” in *Proc. of 30th Conf. on Info. Sciences and Systems (CISS’96)*, Princeton Univ., Princeton, NJ, pp. 1172–1177, March 20-22 1996.
- [C597] G. B. Giannakis and E. Serpedin, “Linear multichannel blind equalizers of nonlinear fir volterra channels,” in *Proc. of 30th Conf. on Info. Sciences and Systems (CISS’96)*, Princeton Univ., Princeton, NJ, pp. 1153–1158, March 20-22 1996.
- [C598] H. Liu, G. B. Giannakis, and M. K. Tsatsanis, “Time-varying system identification: A deterministic blind approach using antenna arrays,” in *Proc. of 30th Conf. on Info. Sciences and Systems (CISS’96)*, Princeton Univ., Princeton, NJ, pp. 880–884, March 20-22, 1996.

1995

- [C599] S. D. Halford and G. B. Giannakis, "Optimal blind equalization and symbol error analysis of fractionally sampled channels," in *Proc. of 29th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1332–1336, Oct. 29–Nov. 1, 1995.
- [C600] M. K. Tsatsanis and G. B. Giannakis, "Subspace methods for blind estimation of direct sequence spread spectrum systems," in *Proc. of 29th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 403–407, Oct. 29–Nov. 1, 1995.
- [C601] M. K. Tsatsanis and G. B. Giannakis, "Blind identification of time-varying channels using second-order statistics," in *Proc. of 29th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 162–166, Oct. 29–Nov. 1, 1995.
- [C602] W. Chen, G. B. Giannakis, and N. Nandhakumar, "A harmonic retrieval framework for discontinuous motion estimation," in *Proc. Intl. Conf. on Image Proces.*, vol. 1, pp. 219–222, Oct. 23–26, 1995.
- [C603] M. K. Tsatsanis and G. B. Giannakis, "Fractional spacing or channel coding for blind equalization?," in *Proc. of Intl. Conf. on Com. & Control: Telecom./Signal Proc. in the Multimedia Era*, Rithymna, Crete, Greece, pp. 451–462, June 26–30, 1995.
- [C604] A. Swami and G. B. Giannakis, "Signal detection and classification in multiplicative and additive noise," in *Proc. of IEEE Workshop on Nonlinear Signal and Image Processing*, vol. 2, Halkidiki, Greece, pp. 839–842, June 20–22, 1995.
- [C605] G. B. Giannakis and W. Chen, "Blind blur identification and multichannel image restoration using cyclostationarity," in *Proc. of IEEE Workshop on Nonlinear Signal and Image Processing*, vol. 2, Halkidiki, Greece, pp. 543–546, June 20–22 1995.
- [C606] A. Swami and G. B. Giannakis, "Adaptive parameter estimation of polynomial phase signals," in *Proc. of Intl. Conf. on HOS*, Barcelona, Spain, pp. 429–431, June 12–14 1995.
- [C607] G. B. Giannakis and M. K. Tsatsanis, "Restoring identifiability of fractionally sampled blind channel estimators using higher-order statistics," in *Proc. of Intl. Conf. on HOS*, Barcelona, Spain, pp. 409–413, June 12–14 1995.
- [C608] G. Zhou, G. B. Giannakis, and A. Swami, "Hos for signals with mixed spectra," in *Proc. of Intl. Conf. on HOS*, Barcelona, Spain, pp. 352–356, June 12–14 1995.
- [C609] G. Zhou, S. Rantala, and G. B. Giannakis, "Condition monitoring of rotating machinery using higher-order spectral slices," in *Proc. of Intl. Conf. on HOS*, Barcelona, Spain, pp. 129–133, June 12–14 1995.
- [C610] W. Chen, G. Zhou, and G. B. Giannakis, "Velocity and acceleration estimation of doppler weather radar/lidar signals in colored noise," in *Proc. of Intl. Conf. on ASSP, (ICASSP'95)*, vol. 3, Detroit, pp. 2052–2055, May 8–12 1995.
- [C611] G. Zhou and A. Swami, "Performance analysis for a class of amplitude modulated polynomial phase signals," in *Proc. of Intl. Conf. on ASSP, (ICASSP'95)*, vol. 3, Detroit, May 8–12 1995.

- [C612] G. B. Giannakis and S. Halford, “Blind fractionally spaced equalization of noisy fir channels: adaptive and optimal solutions,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’95)*, vol. 3, Detroit, pp. 1972–1975, May 8-12 1995.
- [C613] M. K. Tsatsanis and G. B. Giannakis, “Multirate filter banks for code-division multiple access systems,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’95)*, vol. 2, Detroit, pp. 1484–1487, May 8-12 1995.
- [C614] G. B. Giannakis, “Trends in spectral analysis: Higher-order and cyclic statistics,” in *Proc. of Soc. of Photo-Opt. Instr. Engr. (SPIE’95)*, Orlando, FL, April 17-21 1995.
- [C615] G. Zhou and G. B. Giannakis, “Performance analysis of cyclic time-delay estimation algorithms,” in *Proc. of 29th Conf. on Info. Sciences and Systems (CISS’95)*, The Johns Hopkins Univ., Baltimore, pp. 780–785, March 22-24 1995.
- [C616] M. K. Tsatsanis and G. B. Giannakis, “Coding induced cyclostationarity for blind channel equalization,” in *Proc. of 29th Conf. on Info. Sciences and Systems (CISS’95)*, The Johns Hopkins Univ., Baltimore, pp. 685–690, March 22-24 1995.
- [C617] S. Halford and G. B. Giannakis, “Adaptive blind fractionally spaced equalizers using cyclic correlations,” in *Proc. of 29th Conf. on Info. Sciences and Systems (CISS’95)*, The Johns Hopkins Univ., Baltimore, pp. 679–684, March 22-24 1995.
- [C618] M. K. Tsatsanis and G. B. Giannakis, “Beamforming techniques for multi-user detection in cdma systems,” in *Proc. of 29th Conf. on Info. Sciences and Systems (CISS’95)*, The Johns Hopkins Univ., Baltimore, pp. 377–382, March 22-24 1995.
- 1994**
- [C619] M. K. Tsatsanis and G. B. Giannakis, “A basis expansion approach for detecting transient plant disturbances and jumps,” in *Proc. of Conf. on Decision and Control*, Fort Lauderdale, FL, pp. 3412–3417, December 1994.
- [C620] T. E. Hall and G. B. Giannakis, “Image modeling using inverse filtering criteria with application to texture images,” in *Proc. Intl. Conf. on Image Proces.*, vol. 3, Austin, TX, pp. 392–396, November 13-16 1994.
- [C621] W. C. G. B. Giannakis and N. Nandhakumar, “Spatio-temporal approach for time-varying image motion estimation,” in *Proc. Intl. Conf. on Image Proces.*, vol. 2, Austin, TX, pp. 232–236, November 13-16 1994.
- [C622] S. Halford and G. B. Giannakis, “Channel order determination based on cyclic correlation,” in *Proc. of 28th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 425–429, Oct. 31-Nov. 2 1994.
- [C623] G. B. Giannakis, “A linear cyclic correlation approach for blind identification of fir channels,” in *Proc. of 28th Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 420–424, Oct. 31-Nov. 2 1994.
- [C624] G. B. Giannakis and G. Zhou, “Speech modeling with time-varying amplitude and phase,” in *IEEE SP Intl. Symposium on Time-Frequency and Time-Scale Analysis*, Philadelphia, Pennsylvania, pp. 604–607, October 25-28 1994.

- [C625] G. Zhou and G. B. Giannakis, "Parameter estimation of fm signals using cyclic statistics," in *IEEE-SP Intl. Symposium on Time-Frequency and Time-Scale Analysis*, Philadelphia, Pennsylvania, pp. 248–251, October 25-28 1994.
- [C626] S. Halford and G. B. Giannakis, "Asymptotically optimal blind equalizers based on cyclostationary statistics," in *Proc. IEEE Military Communications Conf.*, Fort Monmouth, NJ, pp. 306–310, October 2-5 1994.
- [C627] S. Shamsunder and G. B. Giannakis, "Multichannel signal modeling and separation," in *Proc. 6th IEEE Digital Signal Proces. Workshop*, Yosemite Ntl. Part, CA, pp. 173–176, October 2-5 1994.
- [C628] S. Shamsunder and G. B. Giannakis, "On cyclostationarity and the use of source-receiver motion for localization," in *Proc. 7th European Signal Proc. Conf. (EUSIPCO94)*, Edinburgh, Scotland, pp. 191–194, September 13-16 1994.
- [C629] G. Zhou and G. B. Giannakis, "On damped harmonics and polynomial phase signals," in *Proc. of Soc. of Photo-Opt. Instr. Engr., Advanced Signal Processing Alg., Arch. and Implem. (SPIE'94)*, vol. 2296, San Diego, CA, pp. 213–224, July 1994.
- [C630] G. B. Giannakis and G. Zhou, "On retrieving random amplitude modulated harmonics using higher-order statistics," in *Proc. of Soc. of Photo-Opt. Instr. Engr., Advanced Signal Processing Alg., Arch. and Implem. (SPIE'94)*, vol. 2296, San Diego, CA, pp. 150–161, July 1994.
- [C631] G. Zhou and G. B. Giannakis, "Harmonic estimators in gaussian multiplicative and additive noise: Cramer-rao lower bounds," in *Proc. of 7th SP Wrksp. on Statistical Signal and Array Proces.*, Quebec City, Canada, pp. 325–328, June 26-29 1994.
- [C632] G. Zhou and G. B. Giannakis, "Self coupled harmonics: stationary and cyclostationary approaches," in *Proc. of Intl. Conf. on ASSP, (ICASSP'94)*, Adelaide, Australia, pp. 153–156, 1994.
- [C633] A. Dandawate and G. B. Giannakis, "Signal extraction by exploiting cyclostationarity," in *Proc. of Intl. Conf. on ASSP, (ICASSP'94)*, Adelaide, Australia, pp. 141–144, 1994.
- [C634] G. Zhou and G. B. Giannakis, "Harmonics in multiplicative and additive noise: performance analysis of cyclic estimators," in *Proc. of 28th Conf. on Info. Sciences and Systems (CISS'94)*, Princeton Univ., NJ, pp. 915–919, March 1994.
- [C635] G. B. Giannakis and S. Halford, "Performance analysis of blind equalizers based on cyclostationary statistics," in *Proc. of 28th Conf. on Info. Sciences and Systems (CISS'94)*, Princeton Univ., NJ, pp. 873–876, March 1994.
- 1993**
- [C636] G. Zhou and G. B. Giannakis, "Estimating coupled harmonics in additive and multiplicative noise," in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1250–1254, November 1993.
- [C637] S. Shamsunder and G. Giannakis, "Detection and estimation of chirp signals in non-gaussian noise," in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1191–1195, November 1993.

- [C638] A. Dandawate and G. Giannakis, "Computing the covariance of sample cumulants for stationary and cyclostationary processes," in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 1186–1190, November 1993.
- [C639] T. E. Hall and G. B. Giannakis, "Computing the covariance of sample cumulants for stationary and cyclostationary processes," in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, pp. 456–460, November 1993.
- [C640] T. E. Hall and G. B. Giannakis, "Parameter estimation of random modulated chirp signals," in *Proc. of Ocean Engr. Soc. Conf. (OCEANS'93)*, Victoria, BC, October 1993.
- [C641] M. K. Tsatsanis and G. B. Giannakis, "Adaptive methods for equalization of rapidly fading channels," in *Proc. IEEE Military Communications Conf.*, Boston, MA, pp. 639–643, October 1993.
- [C642] A. V. Dandawate and G. B. Giannakis, "Adaptive methods for equalization of rapidly fading channels," in *the Underwater Signal Proc. Workshop*, Univ. of Rhode Island, RI, October 1993.
- [C643] G. B. Giannakis and S. Shamsunder, "Estimation of chirp signals in the presence of amplitude fluctuation," in *the Underwater Signal Proc. Workshop*, Univ. of Rhode Island, RI, October 1993.
- [C644] M. K. Tsatsanis and G. B. Giannakis, "Blind equalization of mobile radio channels using higher-order cyclostationarity," in *Proc. 4th Intl. Conf. on Advances in Communication and Control*, Rhodes, Greece, June 1993.
- [C645] S. Shamsunder and G. B. Giannakis, "Ambiguity function, polynomial phase and higher-order cyclostationarity," in *Proc. IEEE Workshop on Higher-Order Statistics*, Lake Tahoe, CA, June 1993.
- [C646] A. Dandawate, "Tests for kth-order cyclostationarity," in *Proc. IEEE Workshop on Higher-Order Statistics*, Lake Tahoe, CA, June 1993.
- [C647] G. Zhou and G. B. Giannakis, "Comparison of higher-order and cyclic approaches of estimating random amplitude harmonic," in *Proc. IEEE Workshop on Higher-Order Statistics*, Lake Tahoe, CA, June 1993.
- [C648] C. Mullins, "Multiple window cumulant estimation," in *Proc. IEEE Workshop on Higher-Order Statistics*, Lake Tahoe, CA, June 1993.
- [C649] B. Sadler and G. B. Giannakis, "Detection in colored non-gaussian noise using cumulants," in *Proc. of Intl. Conf. on ASSP*, vol. IV, Minneapolis, MN, April 1993.
- [C650] S. Shamsunder, "Exploiting cyclostationarity for range and bearing estimation," in *Proc. of Intl. Conf. on ASSP*, vol. IV, Minneapolis, MN, April 1993.
- [C651] A. Dandawate, "On consistent and asymptotically normal sample estimators for cyclic moments and cumulants," in *Proc. of Intl. Conf. on ASSP*, vol. IV, Minneapolis, MN, April 1993.
- [C652] G. B. Giannakis and S. Shamsunder, "Information theoretic criteria for non-gaussian arma order determination and parameter estimation," in *Proc. of Intl. Conf. on ASSP*, vol. IV, Minneapolis, MN, April 1993.

- [C653] M. K. Tsatsanis and G. B. Giannakis, "Blind equalization of rapidly fading channels via exploitation of cyclostationarity and higher-order statistics," in *Proc. of Intl. Conf. on ASSP*, vol. IV, Minneapolis, MN, April 1993.
- [C654] G. B. Giannakis and G. Zhou, "Retrieval of random amplitude modulated harmonics using cyclic statistics," in *Proc. of 27th Conf. on Info. Sciences and Systems*, The Johns Hopkins Univ., Baltimore, March 1993.
- [C655] S. Shamsunder and G. B. Giannakis, "Estimation of multicomponent random amplitude polynomial phase signals using higher-order cyclic cumulants," in *Proc. of 27th Conf. on Info. Sciences and Systems*, The Johns Hopkins Univ., Baltimore, March 1993.
- 1992**
- [C656] M. K. Tsatsanis and G. B. Giannakis, "Time-varying system identification using wavelets," in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, October 1992.
- [C657] G. B. Giannakis, G. Zhou, and M. K. Tsatsanis, "On blind channel estimation with misses and equalization of periodically varying channels," in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, October 1992.
- [C658] C. F. Mullins and G. B. Giannakis, "Multiple window autocorrelation estimators with application to adaptive filtering," in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, October 1992.
- [C659] J. Anderson and G. B. Giannakis, "Hos-based harmonic retrieval: a deterministic formulation," in *6th SP Workshop on Statistical Signal and Array Processing*, Victoria, British Columbia, Canada, October 1992.
- [C660] A. Dandawate and G. B. Giannakis, "Nonparametric identification of linear (almost) periodically time-varying systems using cyclic-polyspectra," in *6th SP Workshop on Statistical Signal and Array Processing*, Victoria, British Columbia, Canada, October 1992.
- [C661] M. K. Tsatsanis and G. B. Giannakis, "Principal component filter banks for optimal wavelet analysis," in *6th SP Workshop on Statistical Signal and Array Processing*, Victoria, British Columbia, Canada, October 1992.
- [C662] G. B. Giannakis and S. Shamsunder, "Non-gaussian source localization via exploitation of higher-order cyclostationarity," in *6th SP Workshop on Statistical Signal and Array Processing*, Victoria, British Columbia, Canada, October 1992.
- [C663] G. B. Giannakis and A. V. Dandawate, "Consistent and unified kth-order time-frequency representations for cyclostationary signals," in *IEEE-SP Intl. Symp. on Time-Frequency and Time-Scale Signal Analysis*, Victoria, British Columbia, Canada, October 1992.
- [C664] M. K. Tsatsanis and G. B. Giannakis, "Time-varying channel equalization using multiresolution analysis," in *IEEE-SP Intl. Symp. on Time-Frequency and Time-Scale Signal Analysis*, Victoria, British Columbia, Canada, October 1992.
- [C665] M. K. Tsatsanis and G. B. Giannakis, "A nonparametric approach for detecting changes in the autocorrelation," in *Proc. 6th European Signal Proc. Conf. (EUSIPCO92)*, vol. II, Brussels, Belgium, August 1992.

- [C666] A. Dandawate and G. Giannakis, “Consistent and asymptotically normal cyclic- moment and cumulant estimators and their application to missing observations,” in *the Workshop on Cyclostationary Signals*, Yountville, CA, August 1992.
- [C667] C. F. Mullins and G. B. Giannakis, “Speaker classification using log-bispectra,” in *the Workshop on Cyclostationary Signals*, Yountville, CA, August 1992.
- [C668] G. B. Giannakis and G. Zhou, “Parameter estimation of amplitude modulated signals and cyclostationary time- series with missing observations,” in *Proc. 3rd Intl. Symp. on Signal Proc. & its Appl. (ISSPA’92)*, Coast, Australia, August 1992.
- [C669] G. Zhou and G. B. Giannakis, “Cumulant based stationary and nonstationary models for classification and synthesis of random fields,” in *Proc. of Soc. of Photo-Opt. In- str. Engr., Advanced Signal Processing Alg., Arch. and Implem. (SPIE’92)*, San Diego, CA, July 1992.
- [C670] A. V. Dandawate and G. B. Giannakis, “Detection and classification of cyclostationary signals using cyclic-hos : a unified approach,” in *Proc. of Soc. of Photo-Opt. In- str. Engr., Advanced Signal Processing Alg., Arch. and Implem. (SPIE’92)*, San Diego, CA, July 1992.
- [C671] A. V. Dandawate and G. B. Giannakis, “Cyclic-cumulant based identification of almost periodically time-varying systems: parametric methods,” in *Proc. of Intl. Conf. on ASSP*, vol. V, San Francisco, CA, March 1992.
- [C672] A. V. Dandawate and G. B. Giannakis, “Nonparametric polyspectral estimation of am signals and processes with missing observations,” in *Proc. of 26th Conf. on Info. Sciences and Systems (CISS’92)*, Princeton Univ., NJ, March 1992.
- [C673] M. K. Tsatsanis and G. B. Giannakis, “On the optimum wavelet for statistical multiresolution analysis,” in *Proc. of 26th Conf. on Info. Sciences and Systems (CISS’92)*, Princeton Univ., NJ, March 1992.
- [C674] S. Shamsunder and G. B. Giannakis, “On periodic processes, multivariate modeling and polyspectra,” in *Proc. of 26th Conf. on Info. Sciences and Systems (CISS’92)*, Princeton Univ., NJ, March 1992.
- [C675] G. B. Giannakis and A. V. Dandawate, “Polyspectral analysis of (almost) cyclostationary signals : Lptv system identification and related applications,” in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 1991.
- [C676] S. Shamsunder and G. B. Giannakis, “Wideband source modeling and localization : a hos-based approach,” in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 1991.
- [C677] J. Anderson and G. B. Giannakis, “Iterative i/o system identification using a cumulant based steiglitz-macbride algorithm,” in *Proc. of Asilomar Conf. on Signals, Systems, and Computers*, Pacific Grove, CA, November 1991.
- [C678] M. Tsatsanis and G. B. Giannakis, “Iterative i/o system identification using a cumulant based steiglitz-macbride algorithm,” in *Proc. of IEEE Intl. Conf. on Systems, Man, and Cybernetics (SMC’91)*, Charlottesville, VA, October 1991.

- [C679] G. B. Giannakis and A. V. Dandawate, "Detection and classification of non-stationary underwater acoustic signals using cyclic cumulants," in *the Underwater Signal Proc. Workshop*, Univ. of Rhode Island, October 1991.
- [C680] J. Anderson and G. B. Giannakis, "Two-dimensional harmonic retrieval using cumulants," in *Proc. of 7th Workshop on Multidimensional Signal Processing*, Lake Placid, NY, September 1991.
- [C681] G. B. Giannakis, "Polyspectral analysis of nonstationary signals," in *Proc. Inst. of Math. Statistics*, Atlanta, GA, August 1991.
- [C682] S. Shamsunder and G. B. Giannakis, "Detection and parameter estimation of multiple sources via hos," in *Proc. Intl. Workshop on Higher-Order Statistics*, Chamrousse, France, July 1991.
- [C683] G. B. Giannakis and A. V. Dandawate, "Polyspectral analysis of non-stationary signals: bases, consistency and hos-wv," in *Proc. Intl. Workshop on Higher-Order Statistics*, Chamrousse, France, July 1991.
- [C684] A. Dandawate and G. B. Giannakis, "Polyspectral analysis of non-stationary signals: system identification, classification and ambiguity functions," in *Proc. Intl. Workshop on Higher-Order Statistics*, Chamrousse, France, July 1991.
- [C685] A. Delopoulos and G. B. Giannakis, "Input design for consistent identification in the presence of i/o noise," in *Proc. Intl. Workshop on Higher-Order Statistics*, Chamrousse, France, July 1991.
- [C686] B. Sadler, "Sequential detection using higher-order statistics," in *Proc. of Intl. Conf. on ASSP*, Toronto, Ontario, Canada, May 1991.
- [C687] A. Delopoulos and G. B. Giannakis, "Strongly consistent output only and input/output identification in the presence of gaussian noise," in *Proc. of Intl. Conf. on ASSP*, Toronto, Ontario, Canada, May 1991.
- [C688] G. B. Giannakis and M. Tsatsanis, "Hos or sos for parametric modeling?," in *Proc. of Intl. Conf. on ASSP*, Toronto, Ontario, Canada, May 1991.
- [C689] J. Anderson and G. B. Giannakis, "Noise insensitive image motion estimation using cumulants," in *Proc. of Intl. Conf. on ASSP*, Toronto, Ontario, Canada, May 1991.
- [C690] T. E. Hall and G. B. Giannakis, "Texture model validation using higher-order statistics," in *Proc. of Intl. Conf. on ASSP*, Toronto, Ontario, Canada, May 1991.
- [C691] G. B. G. B. Sadler and D. J. Smith, "Acousto-optic estimation of autocorrelation and spectra using triple-correlations and bispectra," in *Proc. of Soc. of Photo-Opt. Instr. Engr. (SPIE'91)*, Orlando, FL, April 1991.
- [C692] A. Dandawate and G. B. Giannakis, "Ergodic results for non-stationary processes : cumulants, ambiguity functions and wavelets," in *Proc. of 25th Conf. on Info. Sciences and Systems (CISS'91)*, The Johns Hopkins Univ., Baltimore, April 1991.
- [C693] G. B. Giannakis and S. Shamsunder, "Modeling of non- gaussian array data using cumulants : Doa estimation with less sensors than sources," in *Proc. of 25th Conf. on Info. Sciences and Systems (CISS'91)*, The Johns Hopkins Univ., Baltimore, March 1991.

1990

- [C694] G. B. Giannakis, “On identifiability, maximum-likelihood and novel hos based criteria,” in *Proc. of 5th ASSP Workshop on Spectrum Estimation and Modeling*, Rochester, NY, pp. 217–221, October 1990 (invited).
- [C695] B. Sadler and G. B. Giannakis, “On detection with a class of matched filters and higher-order statistics,” in *Proc. of 5th ASSP Workshop on Spectrum Estimation and Modeling*, Rochester, NY, pp. 222–226, October 1990.
- [C696] A. Delopoulos and G. B. Giannakis, “Strongly consistent identification algorithms and noise insensitive mse criteria,” in *Proc. of 4th Digital Signal Processing Workshop*, New Paltz, NY, pp. 8.6.1–8.6.2, September 1990.
- [C697] G. B. Giannakis and A. Delopoulos, “Non-parametric estimation of autocorrelation and spectra using cumulants and polyspectra,” in *Proc. of Soc. of Photo-Opt. Instr. Engr., Advanced Signal Processing Alg., Arch. and Implem. (SPIE’90)*, vol. 1348, San Diego, CA, pp. 503–517, July 1990.
- [C698] M. K. Tsatsanis and G. B. Giannakis, “Translation, rotation and scaling invariant object and texture classification using polyspectra,” in *Proc. of Soc. of Photo-Opt. Instr. Engr., Advanced Signal Processing Alg., Arch. and Implem. (SPIE’90)*, vol. 1348, San Diego, CA, pp. 103–115, July 1990.
- [C699] G. B. Giannakis and A. Dandawate, “Adaptive and nonlinear noise cancellers using higher-order statistics,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’90)*, Albuquerque, New Mexico, pp. 1373–1376, Apr. 1990.
- [C700] M. Rangoussi and G. B. Giannakis, “Fir modeling using log-bispectra: Weighted least-squares algorithms and performance analysis,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’90)*, Albuquerque, New Mexico, pp. 2399–2402, Apr. 1990.
- [C701] G. B. Giannakis and M. Tsatsanis, “Cumulant and polyspectral measures for non-gaussian signal estimation and classification,” in *Proc. of Conf. on Info. Sciences and Systems (CISS’90)*, Princeton Univ., NJ, pp. 1–6, March 1990.

1989

- [C702] M. K. Tsatsanis and G. B. Giannakis, “Object detection and classification using matched filtering and higher-order statistics,” in *Proc. of 6th Workshop on Multidimensional Signal Processing*, Monterey, CA, pp. 32–33, September 1989.
- [C703] T. Hall and S. Wilson, “Stochastic image modeling using cumulants with application to predictive coding,” in *Proc. of Higher-Order Spectral Analysis Workshop*, Vail, CO, pp. 239–244, June 1989.
- [C704] B. Sadler, “Shift and rotation invariant object reconstruction using the bispectrum,” in *Proc. of Higher-Order Spectral Analysis Workshop*, Vail, CO, pp. 106–111, June 1989.
- [C705] A. Dandawate and G. B. Giannakis, “A triple cross- correlation approach for enhancing noisy signals,” in *Proc. of Higher-Order Spectral Analysis Workshop*, Vail, CO, pp. 212–216, June 1989.
- [C706] M. Rangoussi and G. B. Giannakis, “On the use of second- and higher-order inverse statistics,” in *Proc. of Higher-Order Spectral Analysis Workshop*, Vail, CO, pp. 7–12, June 1989.
- [C707] G. B. G. A. Swami and J. Mendel, “A unified approach to modeling multichannel arma processes,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’89)*, Glasgow, Scotland, pp. 2182–2185, May 1989.

- [C708] G. B. G. E. Hall and S. G. Wilson, “Predictive image coding using cumulant based causal and non-causal models,” in *Proc. of Conf. on Info. Sciences and Systems (CISS’89)*, Johns Hopkins Univ., Baltimore, pp. 413–418, March 1989.
- [C709] B. Sadler and G. B. Giannakis, “Image sequence analysis and reconstruction from the bispectrum,” in *Proc. of Conf. on Info. Sciences and Systems (CISS’89)*, Johns Hopkins Univ., Baltimore, pp. 242–246, March 1989.
- 1988**
- [C710] G. B. Giannakis, “New results on multiple correlations,” in *Proc. 22nd Asilomar Conf. on Signals, Systems and Computers*, vol. 1, Pacific Grove, CA, pp. 204–208, November 1988.
- [C711] G. B. Giannakis, “Reconstruction of deterministic signals from multiple correlations,” in *Proc. of Digital Signal Processing Workshop*, Tahoe, CA, pp. 2.5.1–2.5.3, September 1988.
- [C712] G. B. Giannakis and A. Swami, “On estimating non-causal arma non-gaussian processes,” in *Proc. of 4th ASSP Workshop on Spectrum Estimation and Modeling*, Minneapolis, pp. 187–192, August 1988.
- [C713] G. B. Giannakis, “A kronecker product formulation of the cumulant based realization of stochastic systems,” in *Proc. of Amer. Control Conf. (ACC’88)*, Atlanta, pp. 2096–2101, June 1988 (invited).
- [C714] Y. Inouye, G. B. Giannakis, and J. M. Mendel, “Cumulant based parameter estimation of multichannel moving-average processes,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’88)*, pp. 1252–1255, Apr. 1988.
- [C715] A. Swami and G. B. Giannakis, “Arma modeling and phase reconstruction of multidimensional non-gaussian processes using cumulants,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’88)*, pp. 729–732, Apr. 1988.
- [C716] G. B. Giannakis, A. Swami, and J. M. Mendel, “Maximum entropy extrapolation of cumulant statistics: Linear processes,” in *Proc. of Intl. Conf. on ASSP, (ICASSP’88)*, pp. 2316–2319, Apr. 1988.
- 1987**
- [C717] G. B. Giannakis and A. Swami, “New results on state-space and input-output identification of non-gaussian processes using cumulants,” in *Proc. of Soc. of Photo-Opt. Instr. Engr., Advanced Signal Processing Alg., Arch. and Implem. (SPIE’87)*, vol. 826, San Diego, CA, pp. 199–205r, August 1987 (invited).
- [C718] G. B. Giannakis, “Wavelet phase reconstruction using cumulants,” in *Proc. of Intl. Geosc. and Remote Sensing Symposium (IGARSS’87)*, Ann Arbor, MI, pp. 37–41, May 1987.
- [C719] G. B. Giannakis, J. M. Mendel, and X. F. Zhao, “A fast prediction-error detector for estimating sparse spike sequences,” in *Proc. 1987 Intl. Conference on Acoustics, Speech and Signal Processing (ICASSP’87)*, Dallas, TX, pp. 1115–1118, Apr. 1987.
- [C720] G. B. Giannakis, J. M. Mendel, and W. Wang, “Arma modeling using cumulant and autocorrelation statistics,” in *Proc. of Intl. Conf. on Acoustics, Speech and Signal Processing (ICASSP’87)*, Dallas, TX, pp. 61–64, Apr. 1987.
- [C721] G. B. Giannakis, “Cumulants in identification of 1-d (time series) and 2-d (image processing) models,” in *Proc. of Conf. on Info. Sciences and Systems (CISS’87)*, Johns Hopkins Univ., Baltimore, pp. 704–709, March 1987.

1986

- [C722] G. B. Giannakis and J. M. Mendel, “Approximate realization and model reduction of nonminimum phase stochastic systems,” in *Proc. of 25th IEEE Conf. on Decision and Control (CDC’86)*, Athens, Greece, pp. 1079–1084, December 1986.
- [C723] G. B. Giannakis and J. M. Mendel, “Tomographic wavelet estimation via higher-order statistics,” in *Proc. of 56th Intl. Conf., Soc. of Explor. Geophys. (SEG’86)*, Houston, TX, pp. 512–514, October 1986.
- [C724] G. B. Giannakis and J. M. Mendel, “Maximum entropy polyspectral estimation,” in *Proc. SIAM Conf. on Linear Algebra, Signals, Systems and Control*, July 1986.
- [C725] G. B. Giannakis and J. M. Mendel, “Stochastic realization of non-minimum phase systems,” in *Proc. 1986 American Control Conference (ACC’86)*, Seattle, Washington, pp. 1254–1259, June 1986.