

**FORTY-SIXTH
ASILOMAR CONFERENCE ON
SIGNALS, SYSTEMS AND
COMPUTERS**



November 4–7, 2012
Asilomar Hotel and
Conference Grounds

Technical Co-sponsor



FORTY-SIXTH ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS & COMPUTERS

Organized in cooperation with

**NAVAL POSTGRADUATE SCHOOL
Monterey, California**

**ATK SPACE SYSTEMS
Monterey, California**

and technical co-sponsor

IEEE SIGNAL PROCESSING SOCIETY

CONFERENCE COMMITTEE

General Chairman

Prof. Miloš Doroslovački
Department of Electrical and
Computer Engineering
The George Washington
University
801 22nd Street, NW
Washington, DC 20052
E-mail: doroslov@gwu.edu

Technical Program Chairman

Prof. Erik G. Larsson
Department of Electrical
Engineering
Linköping University
SE-581 83 Linköping, Sweden
E-mail: erik.larsson@isy.liu.se

Publicity Chairman

Prof. Linda DeBrunner
Department of Electrical &
Computer Engineering
Florida State University
Tallahassee, FL 32310-6046
E-mail:
Linda.debrunner@eng.fsu.edu

Conference Coordinator

Prof. Monique P. Fargues
Department of Electrical &
Computer Engineering
Naval Postgraduate School
Monterey, CA 93943
E-mail: fargues@nps.edu

Finance Chairman

Prof. Frank Kragh
Department of Electrical &
Computer Engineering
Naval Postgraduate School
Monterey, CA 93943-5121
E-mail: fekragh@nps.edu

Publication Chairman

Dr. Michael B. Matthews
ATK Space Systems
10 Ragsdale Drive, Suite 201
Monterey, CA 93940
E-mail:
michael.matthews@atk.com

Welcome from the General Chairman

Prof. Miloš Doroslovački
The George Washington University

Welcome to this unique conference. Many of us come here from year to year to be exposed to new ideas and to do brainstorming about them in an informal and relaxed way, surrounded by magnificent nature. To cite John Steinbeck, Nobel Prize laureate in literature and local to this part of California: "Ideas are like rabbits. You get a couple and learn how to handle them, and pretty soon you have a dozen." I am sure that the conference will be stimulating for your future professional endeavors.

The biggest credit for the intellectual value of the conference goes to the Technical Program Chair Erik G. Larsson and his team, made of Technical Area Chairs and Session Chairs, as well as to all of you who contributed with papers. Erik and his team prepared an excellent program of 435 papers, including 171 invited, and a tutorial session. For their outstanding work in shaping the technical program I would like to thank Erik and the Technical Area Chairs: Henk Wymeersch, Gerald Matz, Vincent Poor, Erchin Serpedin, Marius Pesavento, Arye Nehorai, Joseph Cavallaro, Ghassan AlRegib and Phil Schniter.

The student paper contest this year attracted 87 submissions out of which 9 were chosen for the final competition. The Student Paper Contest Chair Geert Leus and a panel of judges will select the best three papers after the finalists present their posters on Sunday afternoon. I invite you to attend these presentations and in that way to give support to our young colleagues who will one day build the future of science and technology.

I am looking forward to listening to the plenary talk by Prof. Richard Baraniuk from the Rice University. Rich is an extraordinary researcher, teacher and person. He has been for long time on the frontline of research in compressive sensing, one of the most popular and challenging topics at this conference for several years. I am thrilled, and I guess so are you, to hear from him the report on what has been happening, what is going on now and where to go further.

I wish you three exciting days full of nice talks and walks. I hope that the weather will serve us well and that we will have three beautiful sunsets over the Pacific Ocean.

Miloš Doroslovački, The George Washington University, June 2012

Conference Steering Committee

PROF. MONIQUE P. FARGUES

Chair & Conference Coordinator
Dept. of Electrical & Computer Eng.
833 Dyer Road, Room 437, Code EC/Fa
Naval Postgraduate School
Monterey, CA 93943-5121

PROF. SHERIFF MICHAEL

Secretary
Dept. of Electrical & Computer Eng.
833 Dyer Road, Room 437, Code EC/Mi
Naval Postgraduate School
Monterey, CA 93943-5121

PROF. FRANK KRAGH

Treasurer
Dept. of Electrical & Computer Eng.
833 Dyer Road, Room 437, Code EC/Kr
Naval Postgraduate School
Monterey, CA 93943-5121

PROF. SCOTT ACTON

Dept. Electrical & Computer
Engineering
University of Virginia
P.O. Box 400743
Charlottesville, VA 22904-4743

PROF. MAITE BRANDT-PEARCE

Dept. of Electrical & Computer Eng.
University of Virginia
351 McCormick Road
Charlottesville, VA 22904
Mb-p@virginia.edu

PROF. VICTOR E. DEBRUNNER

Dept. of Electrical & Computer
Engineering
Florida State University
2525 Pottsdamer Street
Tallahassee, FL 32310-6046

PROF. MILOS ERCEGOVAC

Computer Science Department
University of California, Los Angeles
Los Angeles, CA 90095

PROF. BENJAMIN FRIEDLANDER

Dept. of Electrical & Computer Eng., SOE
Room 119, Jack Baskin Engineering Bldg.
University of California, Santa Cruz
Santa Cruz, CA 95064

PROF. frederic j. harris

Dept. of Electrical Engineering
San Diego State University
San Diego, CA 92182

DR. MICHAEL B. MATTHEWS

Publications Chair
ATK Space Systems
10 Ragsdale Drive, Suite 201
Monterey, CA 93940

PROF. LINDA DEBRUNNER

Publicity Chair
Dept. of Electrical & Computer Eng.
Florida State University
2525 Pottsdamer Street
Tallahassee, FL 32310-6046

RALPH D. HIPPENSTIEL

Private Consultant
rhippenstiel@yahoo.com

PROF. W. KENNETH JENKINS

The Pennsylvania State University
129 Electrical Engineering East
University Park, PA 16802-2705

PROF. JAMES A. RITCEY

Dept. of Electrical Engineering
Box 352500, FT-10
University of Washington
Seattle, WA 98195

PROF. MICHAEL SCHULTE

Advanced Micro Devices
11400 Cherisse Drive
Austin, TX 78739
Michael.schulte@amd.com

PROF. EARL E. SWARTZLANDER, JR.

Dept. of Electrical & Computer Eng.
University of Texas at Austin
Austin, TX 78712

PROF. KEITH A. TEAGUE

Chair, School of Electrical & Computer Eng.
202 Engineering South
Oklahoma State University
Stillwater, OK 74078-5032

DR. JAMES SCHROEDER

General Program Chair (ex officio)
Year 2011
Harris Government Comm Systems
Cover Technology Center
MS 1-11B, P.O. Box 0017
Melbourne, FL 32903-0017
Jim.schroeder@harris.com

2012 Asilomar Technical Program Committee

Technical Chair
Prof. Erik G. Larsson
Linköping University

2012 Asilomar Technical Program Committee Members

A. Communications Systems

Prof. Henk Wymeersch
Chalmers University, Sweden
Email: henkw@chalmers.se

B. MIMO Communications and Signal Processing

Prof. Gerald Matz
TU Vienna, Austria
Email: gerald.matz@nt.tuwien.ac.at

C. Networks

Prof. Vincent Poor
Princeton University
Email: poor@princeton.edu

D. Signal Processing and Adaptive Systems

Prof. Erchin Serpedin
Texas A&M University
Email: serpedin@ece.tamu.edu

E. Array Signal Processing

Prof. Marius Pesavento
TU Darmstadt, Germany
Email: marius.pesavento@nt.tu-darmstadt.de

F. Biomedical Signal and Image Processing

Prof. Arye Nehorai
Washington University at St. Louis
Email: nehorai@ese.wustl.edu

G. Architecture and Implementation

Prof. Joseph Cavallaro
Rice University
Email: cavallar@rice.edu

H. Speech, Image and Video Processing

Prof. Ghassan AlRegib
Georgia Institute of Technology
Email: alregib@gatech.edu

Student Paper Contest Chair

Prof. Geert Leus
Delft University of Technology
Email: g.j.t.leus@tudelft.nl

Vice Track Chair

Prof. Phil Schniter
Ohio State University
Email: schniter@ece.osu.edu

2012 Asilomar Conference Session Schedule

Sunday Afternoon, November 4, 2012

2:00 - 7:00 PM	Registration — Main Lodge
4:00 - 6:30 PM	Student Paper Contest — Merrill Hall
7:00 - 9:00 PM	Welcoming Dessert Reception — Merrill Hall

Monday Morning, November 5, 2012

7:30 - 9:00 AM	Breakfast – Crocker Dining Hall
8:00 AM - 6:00 PM	Registration
8:15 - 9:45 AM	MA1a — Conference Welcome and Plenary Session
9:45 - 10:15 AM	Coffee Social

10:15 AM - 12:00 PM MORNING SESSIONS

MA1b	Graphical Models in Signal Processing (invited)
MA2b	Threshold Limits in Array Processing: Performance Analysis and Methods (invited)
MA3b	Full-Duplex MIMO Communications (special session)
MA4b	Green Radio (invited)
MA5b	Voice Coding (invited)
MA6b	DSP Architecture for Wireless Communications (invited)
MA7b	Brain Dynamics: Improving Spatial and Temporal Resolution
MA8b1	Communication Systems I (Poster)
MA8b2	Array Signal Processing I (Poster)

12:00 - 1:00 PM	Lunch – Crocker Dining Hall
-----------------	-----------------------------

Monday Afternoon, November 5, 2012

1:30 - 5:10 PM AFTERNOON SESSIONS

MP1a	Compressive Sensing (invited)
MP1b	Signal Processing and Learning in Complex Systems (invited)
MP2a	Source Localization in Distributed Sensor Arrays (invited)
MP2b	Network Beamforming (invited)
MP3a	Large-Scale MIMO Systems (special session)
MP3b	Coordinated Multipoint (invited)
MP4a	Cognitive Radio Networks (invited)
MP4b	Machine-to-Machine Communications and Networks (invited)
MP5a	Image and Video Coding (invited)
MP5b	Convex Optimization in Image and Video Analysis (invited)
MP6a	Computer Arithmetic (invited)
MP6b	Reconfigurable Architectures, Many-Core, Multi-Core, and SoC (invited)
MP7a	Medical Image Analysis
MP7b	Biological Modeling and Signal Analysis (partly invited)
MP8a1	MIMO Communications and Signal Processing I (Poster)
MP8a2	Signal Processing and Adaptive Systems I (Poster)

Monday Evening, November 5, 2012

6:00 - 9:30 PM	Conference Cocktail/Social — Merrill Hall The Cocktail/Social takes the place of Monday's dinner. No charge for conference attendees or their guests.
----------------	--

2012 Asilomar Conference Session Schedule

(continued)

Tuesday Morning, November 6, 2012

7:30 - 9:00 AM Breakfast — Crocker Dining Hall

8:00 AM - 5:00 PM Registration

8:15 - 12:00 PM MORNING SESSIONS

- TA1a MIMO in Optical Communications (invited)
- TA1b Wireless Video Transmission Systems (invited)
- TA2a Game Theory in Communications (invited)
- TA2b Coding Theory for the Next-Generation Storage Systems (invited)
- TA3a Multiuser and Massive MIMO (invited)
- TA3b Compressive Estimation
- TA4a Social Networks (invited)
- TA4b Signal Processing for Cyber-Security and Privacy in Networks (invited)
- TA5a 3D Video Processing (invited)
- TA5b Computer Arithmetic Accelerators for Signal Processing
- TA6a Low Power I (invited)
- TA6b Low Power II (invited)
- TA7a Biological Networks and Machine Learning (partly invited)
- TA7b Sequence and Genome Analysis (partly invited)
- TA8a1 Array Signal Processing II (Poster)
- TA8a2 Signal Processing and Adaptive Systems II (Poster)
- TA8b1 Communication Systems II (Poster)
- TA8b2 MIMO Communications and Signal Processing II (Poster)
- TA8b3 Architecture and Implementation of Signal Processing Systems (Poster)

12:00 - 1:00 PM Lunch — Crocker Dining Hall

Tuesday Afternoon, November 6, 2012

1:30 - 5:35 PM AFTERNOON SESSIONS

- TP1a Network Optimization (invited)
- TP1b Distributed Signal Processing (invited)
- TP2a Consensus Based Algorithms
- TP2b Cooperative Adaptation and Learning (invited)
- TP3a Information Theoretic Signal Processing
- TP3b Underwater Communications (invited)
- TP4a Decoding and Detection
- TP4b Smart Grid Communications and Networks (invited)
- TP5a Design Methodologies and Architectures for Communications
- TP5b Interference Alignment (invited)
- TP6a Wireless Full Duplex
- TP6b Biological Image Analysis
- TP7a MIMO Radar and Waveform Design
- TP7b Speech Processing and Speech Recognition (invited)
- TP8a1 Relay Networks (Poster)
- TP8a2 Sensor and Interference Networks (Poster)
- TP8a3 Design Methodology and Computer Arithmetic (Poster)
- TP8b1 Speech, Image, and Video Processing (Poster)
- TP8b2 Biomedical Signal and Image Processing (Poster)

Tuesday Evening Open Evening — Enjoy the Monterey Peninsula

2012 Asilomar Conference Session Schedule

(continued)

Wednesday Morning, November 7, 2012

7:30 - 9:00 AM Breakfast — Crocker Dining Hall

8:00 AM - 12:00 PM Registration — Copyright forms must be turned in before the registration closes at 12:00 noon.

8:15 AM - 12:00 PM MORNING SESSIONS

WA1a Feedback and Cooperation (invited)

WA1b Security

WA2a Distributed Algorithms for Wireless Networks

WA2b Topics in Wireless Networking

WA3a Adaptive Signal Processing

WA3b Compressive Signal Processing

WA4a Interference and Cognition

WA4b OFDM(A)

WA5a Applications of Video Processing

WA5b Image and Video Classification

WA6a CSI Feedback

WA6b Beamforming and Relaying (invited)

WA7a Applications of Sensor Array Processing

WA7b DOA Estimation

WA8 Tutorial – Coding Methods for Emerging Storage Systems

12:00 - 1:00 PM Lunch — Meal tickets may be purchased at registration desk. This meal is not included in the registration.

WA8 - TUTORIAL

Coding Methods for Emerging Storage Systems – Prof. Lara Dolecek and Prof. Anxiao (Andrew) Jiang

Abstract - Recent surge in large-scale data storage systems has created an immediate need to develop new coding methodologies attuned to the physical properties of the emerging non-volatile memory technologies. In this tutorial, we will first discuss new channel models for these technologies and demonstrate why the existing coding methods are increasingly inadequate. We will then survey recently proposed error correcting codes, modulation schemes and rewriting codes, all designed to meet the physical characteristics of the non-volatile memories while ensuring maximum lifetime and reliability. The tutorial will conclude with a discussion of several open problems in this area.

Bio: Prof. Lara Dolecek is an assistant professor in the Electrical Engineering Department at UCLA where she heads the Laboratory for Robust Information Systems. She received NSF CAREER Award in 2012, Hellman Fellow award in 2011, and David J. Sakrison Award from the EECS Department at UC Berkeley in 2007. Prof. Anxiao (Andrew) Jiang is an associate professor in Computer Science and Engineering Department of TAMU. He received NSF CAREER Award in 2008 and the 2009 IEEE Communications Society Best Paper Award in Signal Processing and Coding for Data Storage.

Student Paper Contest

Merrill Hall - Sunday, November 4, 2012, 4:00 - 6:30 PM
(Listed in category/track order)

Track A

"Unicasting on the S-Graph"

Satyanaranaya Vuppala and Giuseppe Abreu

Track B

"Volume of Ball and Hamming-type Bounds for Stiefel Manifold with Euclidean Distance"

Renaud-Alexandre Pitaval and Olav Tirkkonen

Track C

"Distributed Gram-Schmidt Orthogonalization Based on Dynamic Consensus"

Ondrej Slučiak, Hana Straková, Markus Rupp, and Wilfried N. Gansterer

Track D

"Identifying Multiple Infection Sources in a Network"

Wuqiong Luo and Wee Peng Tay

"The Gaussian CEO Problem for a Scalar Source with Memory: A Necessary Condition"

Jie Chen, Feng Jiang and A. Lee Swindlehurst

Track E

"Transmit Beam-space Design for Direction Finding in Colocated MIMO Radar with Arbitrary Receive Array and Even Number of Waveforms"

Arash Khabbazi-basmenj, Sergiy A. Vorobyov, Aboulnasr Hassanien, and Matthew W. Morency

Track F

"Screening Fundus Images for Diabetic Retinopathy"

Sohini Roychowdhury, Dara Koozekanani, and Keshab K. Parhi

Track G

"A Low-Power Dual-Path Floating-Point Fused Add-Subtract Unit"

Jae Hong Min, Jongwook Sohn, and Earl E. Swartzlander, Jr.

Track H

"Joint Tracking of Clean Speech and Noise Using HMMs and Particle Filters for Robust Speech Recognition"

Aleem Mushtaq and Chin-Hui Lee

2012 Asilomar Conference Session Schedule

Coffee breaks will be at 9:55 AM and 3:10 PM. (Except Monday morning when refreshments will be served outside Merrill Hall from 9:45–10:15 AM)

Monday, November 5, 2012

CONFERENCE WELCOME AND PLENARY SESSION 8:15 – 9:45 AM

1. Welcome from the General Chairperson

Prof. Miloš Doroslovački
The George Washington University

2. Session MA1a Distinguished Lecture for the 2012
Asilomar Conference

Compressive Sensing: 8 Years After

Prof. Richard G. Baraniuk
Victor E. Cameron Professor
Rice University

Abstract

Sensing and imaging systems are under increasing pressure to accommodate ever larger and higher-dimensional data sets; ever faster capture, sampling, and processing rates; ever lower power consumption; communication over ever more difficult channels; and radically new sensing modalities. Since its discovery in 2004, compressive sensing (CS) has stimulated a re-thinking of sensor and signal processing system design. In CS, analog signals are digitized and processed not via uniform sampling but via measurements using more general, even random, test functions. In contrast with conventional wisdom, the new theory asserts that one can combine “sub-Nyquist-rate sampling” with large-scale optimization for efficient and accurate signal acquisition when the signal has a sparse structure. In this talk, we will review the progress in field over the last eight years, with a special emphasis on the pros and cons of the technique.

Biography

Richard G. Baraniuk is the Victor E. Cameron Professor of Electrical and Computer Engineering at Rice University. His research interests lie in new theory, algorithms, and hardware for sensing, signal processing, and machine learning. He is a Fellow of the IEEE and AAAS and has received national young investigator awards from the US NSF and ONR, the Rosenbaum Fellowship from the Isaac Newton Institute of Cambridge University, the ECE Young Alumni Achievement Award from the University of Illinois, and the Wavelet Pioneer and Compressive Sampling Pioneer Awards from SPIE. His work on the Rice single-pixel compressive camera has been widely reported in the popular press and was selected by MIT Technology Review as a TR10 Top 10 Emerging Technology for 2007. For his teaching and education projects, including Connexions (cnx.org), he has received the C. Holmes MacDonald National Outstanding Teaching Award from Eta Kappa Nu, Tech Museum of Innovation Laureate Award, the Internet Pioneer Award from the Berkman Center for Internet Society at Harvard Law School, the World Technology Award for Education, the IEEE-SPS Education Award, and the WISE Education Award.

**Program of the
2012 Asilomar Conference on
Signals, Systems, and Computers**

**Technical Program Chairman
Prof. Erik G. Larsson
Linköping University**

Session MA1b Graphical Models in Signal Processing (invited)

Chair: *Lorenzo Vangelista, University of Padova*

- MA1b-1 Approximate Message Passing for Spectral Estimation: A Solution to the Gridding Problem? 10:15 AM
Philip Schniter, Ohio State University; Christian Austin, MIT Lincoln Laboratory; Jason Parker, Air Force Research Laboratory
- MA1b-2 Local Consensus Estimators for Distributed Learning of Graphical Models 10:40 AM
Qiang Liu, Alexander Ihler, University of California, Irvine
- MA1b-3 Sparse Covariance Selection with Edge Restrictions 11:05 AM
Anastasios Kyrillidis, Volkan Cevher, École Polytechnique Fédérale de Lausanne
- MA1b-4 Learning Graphical Models for Dynamical Processes 11:30 AM
Andrea Montanari, Jose Bento, Morteza Ibrahimi, Stanford University

Session MA2b Threshold Limits in Array Processing: Performance Analysis and Methods (invited)

Chair: *Mohammed Nabil El Korso, TU Darmstadt*

- MA2b-1 Threshold Performance for Conditional and Unconditional Direction-of-Arrival Estimation 10:15 AM
Yuri I. Abramovich, Defence Science and Technology Organisation; Ben A. Johnson, Lockheed Martin Australia and ITR
- MA2b-2 Aspects of Threshold Region Mean-Squared Error Prediction: Method of Interval Errors, Bounds, Taylor's, and Extensions 10:40 AM
Christ D. Richmond, Larry L. Horowitz, MIT Lincoln Laboratory
- MA2b-3 Lower Bounds on the MSE for Mixed Far-Field and Near-Field Sources Direction-of-Arrivals 11:05 AM
Alexandre Renaux, Remy Boyer, Paris XI Univ.; Sylvie Marcos, CNRS
- MA2b-4 On the Resolvability of Closely Spaced Targets Using a MIMO Radar 11:30 AM
Mohammed Nabil El Korso, Technische Universität Darmstadt; Frédéric Pascal, Supélec / SONDRRA; Marius Pesavento, Technische Universität Darmstadt

Session MA3b Full-Duplex MIMO Communications (special session)

Chair: *Dan Bliss, MIT Lincoln Laboratory*

- | | | |
|--------|---|----------|
| MA3b-1 | Phase Noise: Understanding the Bottleneck in Full-duplex Designs
<i>Achaleshwar Sahai, Gaurav Patel, Ashutosh Sabharwal, Rice University</i> | 10:15 AM |
| MA3b-2 | Hardware and Environmental Phenomenological Limits on Full-Duplex MIMO Relay Performance
<i>Daniel Bliss, Timothy Hancock, Massachusetts Institute of Technology; Phil Schniter, Ohio State University</i> | 10:40 AM |
| MA3b-3 | Open Problems in Full Duplex Wireless
<i>Phil Levis, Stanford University</i> | 11:05 AM |
| MA3b-4 | Analog and Digital Self-Interference Cancellation in Full-Duplex MIMO-OFDM Transceivers with Limited Resolution in A/D Conversion
<i>Taneli Riihonen, Aalto University</i> | 11:30 AM |

Session MA4b Green Radio (invited)

Co-Chairs: *Cristina Comaniciu, Stevens Institute of Technology and Aylin Yener, Penn State University*

- | | | |
|--------|---|----------|
| MA4b-1 | On Energy Harvesting Multi-User Networks with Energy Storage Imperfections
<i>Kaya Tutuncuoglu, Aylin Yener, Penn State</i> | 10:15 AM |
| MA4b-2 | Information-Theoretically Achievable Rates in an Energy Harvesting Broadcast Channel
<i>Omur Ozel, Sennur Ulukus, University of Maryland</i> | 10:40 AM |
| MA4b-3 | Throughput and Energy Efficiency under Queueing and Secrecy Constraints
<i>Mustafa Cenk Gursoy, Mustafa Ozmen, Syracuse University</i> | 11:05 AM |
| MA4b-4 | Non-Invasive Green Small Cell Network
<i>Baher Mawlawi, Ejder Bastug, Chahé Nerguizian, Sylvain Azarian, Mérouane Debbah, Supelec</i> | 11:30 AM |

Session MA5b Voice Coding (invited)

Chair: *Jerry D. Gibson, University of California, Santa Barbara*

- | | | |
|--------|---|----------|
| MA5b-1 | Scalable Wideband Speech Coding for IP Networks
<i>Koji Seto, Tokunbo Ogunfunmi, Santa Clara University</i> | 10:15 AM |
| MA5b-2 | Multimode Tree Coding of Speech with Backward Pitch Prediction and Perceptual Pre- and Post-weighting
<i>Ying-Yi Li, Jerry Gibson, University of California, Santa Barbara</i> | 10:40 AM |
| MA5b-3 | Source Models and Rate Distortion Bounds for Speech
<i>Jerry Gibson, University of California, Santa Barbara</i> | 11:05 AM |

- MA5b-4 Compressed Sensing Based Scalable Speech 11:30 AM
 Coders
*Bhaskar Rao, Michelle Daniels, University of California,
 San Diego*

Session MA6b DSP Architecture for Wireless Communications (invited)

Chair: *Ahmed Eltawil, University of California, Irvine*

- MA6b-1 Verifying Equivalence of Digital Signal 10:15 AM
 Processing Circuits
Keshab Parhi, University of Minnesota
- MA6b-2 Implementation of a Real-Time Wireless 10:40 AM
 Interference Alignment Network
*Jackson Massey, Jonathan Starr, Andreas Gerslauer,
 Robert Heath, University of Texas at Austin*
- MA6b-3 $\Sigma\Delta$ Modulators for Low-power Digitally 11:05 AM
 Intensive Radio Transmitters.
*Rashmi Nanda, Dejan Markovic, University of California,
 Los Angeles*
- MA6b-4 A Sphere Decoding Approach for The Vector 11:30 AM
 Viterbi Algorithm
*Peter Kairouz, Aolin Xu, Naresh Shanbhag, Andrew
 Singer, University of Illinois, Urbana-Champaign*

Session MA7b Brain Dynamics: Improving Spatial and Temporal Resolution

Chair: *Hubert Preissl, University of Tübingen*

- MA7b-1 Signal Artefacts in Functional MRI Studies of 10:15 AM
 the Unsedated Human Fetal Brain In-Utero
Colin Studholm, University of Washington
- MA7b-2 New Perspectives in MEG Functional 10:40 AM
 Connectivity
Paolo Belardinelli, University of Tübingen
- MA7b-3 Inferring Biological Network Connectivity 11:05 AM
 Using a Novel Phase Synchronization Technique
*Rathinaswamy Govindan, Children's National Medical
 Center; Jan Raethjen, University of Kiel; Adre du Plessis,
 Children's National Medical Center*
- MA7b-4 Spatio-temporal Dynamics in Movement 11:30 AM
 Control: New Vistas for Closed-loop Decoding
 Using MEG
Matthias Witte, University of Graz

Session MA8b1 Communication Systems I

Chair: *David Browne, MIT Lincoln Laboratory*

10:15 AM - 12:00 PM

- MA8b1-1 Optimum Training for CSI Acquisition in Cognitive
 Radio Channels
*Alberto Rico-Alvariño, Carlos Mosquera, Universidade
 de Vigo*

- MA8b1-2 Spectrum Opportunity Detection with Weak and Correlated Signals
Yao Xie, Duke University; David Siegmund, Stanford University
- MA8b1-3 A Blind Linear Smoothing Method for OFDM Systems without Cyclic Prefix
Xiaodong Yue, Songlin Tian, Xuefu Zhou, University of Central Missouri
- MA8b1-4 Soft-Output Sphere Detection for Coded Unique Word OFDM
Alexander Onic, Alpen-Adria-Universität Klagenfurt; Andreas Schenk, Friedrich-Alexander-Universität Erlangen-Nürnberg; Mario Huemer, Alpen-Adria-Universität Klagenfurt; Johannes B. Huber, Friedrich-Alexander-Universität Erlangen-Nürnberg
- MA8b1-5 A Cross-Layer HARQ Scheme Robust to Imperfect Feedback
Sébastien Marcille, Thales Communications and Security; Philippe Ciblat, Télécom ParisTech; Christophe Le Martret, Thales Communications and Security
- MA8b1-6 A Representation for the Symbol Error Rate of Arbitrary Constellations under AWGN
Adithya Rajan, Cihan Tepedelenlioglu, Arizona State University
- MA8b1-7 Systematic Pruning of Blind Decoding Results
Dongwoon Bai, Jungwon Lee, Sungsoo Kim, Hanju Kim, Inyup Kang, Samsung US R&D Center
- MA8b1-8 Underlay Cognitive Radios with Finite Transmission Modes and Capacity Guarantees for Primary Users
Antonio G. Marques, Javier Ramos, Carlos Figuera, Eduardo Morgado, King Juan Carlos University
- MA8b1-9 Stochastic Soft-Input Soft-Output Detection for Intersymbol Interference Channels
Werner Haselmayr, Bernhard Etzlinger, Andreas Springer, Johannes Kepler University
- MA8b1-10 Generic Low Complex Filter Bank Based Spectrum Sensing Approach for LTE Cognitive Radio
Thomas Schlechter, Mario Huemer, Alpen-Adria Universität Klagenfurt
- MA8b1-11 A Study of Data Rate Equivalent UW-OFDM and CP-OFDM Concepts
Christian Hofbauer, Mario Huemer, Klagenfurt University
- MA8b1-12 Constrained Least-Squares Estimation and Compensation of Phase Noise in OFDM Radio Link
Pramod Mathecken, Taneli Riihonen, Stefan Werner, Risto Wichman, Aalto University School of Electrical Engineering
- MA8b1-13 Stopping Criteria for Iterative Decoding Based on Mutual Information
Jinhong Wu, Samsung Information Systems America; Branimir Vojcic, Jia Sheng, George Washington University

- MA8b1-14 Frequency-Selective I/Q Imbalance Compensation for OFDM Receivers Using Decision-Feedback Adaptive Filtering
R. Keith McPherson, Jim Schroeder, Harris Corporation
- MA8b1-15 Non-data Aided Symbol and Carrier Synchronization via Band-Edge Filters
Xiaofei Chen, Elettra Venosa, fredric harris, San Diego State University; Chris Dick, Xilinx Corp.
- MA8b1-16 Coded QPSK Using Balanced Incomplete Block Design
Mohammad Noshad, Maite Brandt-Pearce, University of Virginia

Session MA8b2 Array Signal Processing I

Chair: *Marius Pesavento, TU Darmstadt*

10:15 AM - 12:00 PM

- MA8b2-1 Passive Radar Signal Processing in Single Frequency Networks
Konstanty Bialkowski, I. Vaughan Clarkson, University of Queensland
- MA8b2-2 Direct Passive Geolocation under Propagation Speed Uncertainty
Guy Liron, RAFAEL Advanced Defense Systems; Anthony J. Weiss, Tel Aviv University; Alon Amar, RAFAEL Advanced Defense Systems
- MA8b2-3 How to Design a Delay-and-Sum Beamformer for Rigid Rotationally Symmetric Arrays?
Karim Helwani, Sascha Spors, Telekom Innovation Laboratories, Technische Universität Berlin; Herbert Buchner, Technische Universität Berlin
- MA8b2-4 Optimal Diagonal Loading for Spatial Spectrum Estimation in the Snapshot Deficient Regime
Milutin Pajovic, Massachusetts Institute of Technology/ Woods Hole Oceanographic Institution; James Preisig, Woods Hole Oceanographic Institution; Arthur Baggeroer, Massachusetts Institute of Technology
- MA8b2-5 2D DOA Estimation of Multiple Coherent Sources Using a New Antenna Array Configuration
Nizar Tayem, Prince Mohammad Bin Fahd University
- MA8b2-6 Performance Analysis on Synthetic Aperture Radar-based Vibration Estimation in Clutter
Qi Wang, Balu Santhanam, Matthew Pepin, Majeed Hayat, University of New Mexico
- MA8b2-7 Search Methods for Determining Direction of Arrival Acoustically
David Grasing, Sean Schumer, Anthony Rotolo, US Army
- MA8b2-8 Implementation and Demonstration of Receiver-Coordinated Distributed Transmit Beamforming across an Ad-Hoc Radio Network.
Pat Bidigare, Miguel Oyarzun, David Raeman, Dave Cousins, Dan Chang, Rich O'Donnell, Raytheon BBN Technologies; Rick Brown, Worcester Polytechnic Institute

- MA8b2-9 Algebraic Confidence for Sensor Localization
Jani Saloranta, University of Oulu; Stefano Severi, Jacobs University Bremen; Davide Macagnano, University of Oulu; Giuseppe Abreu, Jacobs University Bremen
- MA8b2-10 Breaking the Isotropic Scattering Assumption in Wide-beam Stripmap SAR Imaging
Jacob Gunther, Utah State University; Chad Knight, Space Dynamics Laboratory; Todd Moon, Utah State University
- MA8b2-11 A Distributed Adaptive GSC Beamformer over Coordinated Antenna Arrays Network for Interference Mitigation
Songtao Lu, Jinping Sun, Beihang University
- MA8b2-12 Spatial Coherence Modeling for Passive Ranging Using Distributed Arrays
Hongya Ge, New Jersey Institute of Technology; Ivars Kirsteins, Naval Undersea Warfare Center
- MA8b2-13 Waveform Diversity and Optimal Change Detection
Carl Rossler, Emre Ertin, Randolph Moses, Ohio State University
- MA8b2-14 Subband Gradient Flow Acoustic Source Separation for Moderate Reverberation Environment
Shuo Li, Milutin Stanacevic, Stony Brook University
- MA8b2-15 Gradient Flow Source Localization in Noisy and Reverberant Environment
Shuo Li, Milutin Stanacevic, Stony Brook University
- MA8b2-16 Analysis of Data Fusion Techniques for Small Arms Fire Localization
David Grasing, George Cakiades, Sachi Desai, U.S. Army RDECOM-ARDEC

Session MP1a Compressive Sensing (invited)

Chair: *Christoph Studer, Rice University*

- | | | |
|--------|--|---------|
| MP1a-1 | Effect of Spatial Coupling and Bayesian Priors on Compressive Sensing Performance
<i>Arian Maleki, Christoph Studer, Jianing Shi, Richard Baraniuk, Rice University</i> | 1:30 PM |
| MP1a-2 | Structured Signal Recovery from Single-Bit Measurements
<i>Yaniv Plan, University of Michigan</i> | 1:55 PM |
| MP1a-3 | CoSaMP with Redundant Dictionaries
<i>Mark Davenport, Stanford University; Deanna Needell, Claremont McKenna College; Michael Wakin, Colorado School of Mines</i> | 2:20 PM |
| MP1a-4 | Compressed Sensing with Radar Applications
<i>Max Hugel, Holger Rauhut, University of Bonn; Thomas Strohmer, University of California, Davis</i> | 2:45 PM |

Session MP1b Signal Processing and Learning in Complex Systems (invited)

Chair: *Michael Rabbat, McGill University*

- | | | |
|--------|--|---------|
| MP1b-1 | Dynamics of Social Connections
<i>Lin Li, Anna Scaglione, University of California, Davis</i> | 3:30 PM |
|--------|--|---------|

MP1b-2	Dynamic Games with Side Information in Economic Networks <i>Ceyhun Eksin, Pooya Molavi, Alejandro Ribeiro, University of Pennsylvania</i>	3:55 PM
MP1b-3	Adaptive Decision-Making over Complex Networks <i>Sheng-Yuan Tu, Ali Sayed, University of California, Los Angeles</i>	4:20 PM
MP1b-4	A Factor Graph Approach to Diffusion Adaptive Filtering Methods <i>Andrew Bean, Thomas Riedl, Andrew Singer, University of Illinois, Urbana-Champaign</i>	4:45 PM

Session MP2a Source Localization in Distributed Sensor Arrays (invited)

Chair: *Christoph Mecklenbräuker, TU Vienna*

MP2a-1	Convergence Analysis of Distributed PAST Based on Consensus Propagation <i>Carolina del Socorro Reyes Membreno, Markus Rupp, Vienna University of Technology</i>	1:30 PM
MP2a-2	Localization of Acoustic Sources Utilizing a Decentralized Particle Filter <i>Florian Xaver, Gerald Matz, Vienna University of Technology; Peter Gerstoft, University of California, San Diego; Norbert Götz, Vienna University of Technology</i>	1:55 PM
MP2a-3	Bayesian Sparse Sensing of the Japanese 2011 Earthquake <i>Peter Gerstoft, University of California, San Diego; Christoph Mecklenbräuker, Vienna University of Technology</i>	2:20 PM
MP2a-4	Distributed Source Localization in Subarray Sensor Networks. <i>Christian Steffens, Michael Rübsamen, Marius Pesavento, Technische Universität Darmstadt</i>	2:45 PM

Session MP2b Network Beamforming (invited)

Chair: *Shahram Shahbazpanahi, University of Ontario Institute of Technology*

MP2b-1	Distributed Beamforming in Coarsely Synchronized Relay Networks <i>Adrian Schad, Technische Universität Darmstadt; Babak Khalaj, Sharif University of Technology; Marius Pesavento, Technische Universität Darmstadt</i>	3:30 PM
MP2b-2	Distributed Beamforming for Two-Way Relaying Networks with Individual Power Constraints <i>Jianshu Zhang, Florian Römer, Martin Haardt, Technische Universität Ilmenau</i>	3:55 PM
MP2b-3	Beamforming Design for Two-Way Relay Networks Under Per-Node Power Constraint <i>Shahram ShahbazPanahi, University of Ontario; Yindi Jing, University of Alberta</i>	4:20 PM

- MP2b-4 Improving Achievable Rate for the Two-User SISO Interference Channel with Improper Gaussian Signaling 4:45 PM
Yong Zeng, Mustafa Cenk Yetis, Erry Gunawan, Yong Liang Guan, Nanyang Technological University; Rui Zhang, National University of Singapore

Session MP3a Large-Scale MIMO Systems (special session)

Co-Chairs: *Tom Marzetta, Alcatel-Lucent/Bell-Labs and Saif K. Mohammed, Linköping University*

- MP3a-1 Spectral Efficiency in Large-Scale MIMO-OFDM Systems with Per Antenna Power Cost 1:30 PM
Derrick Wing Kwan Ng, Robert Schober, University of British Columbia
- MP3a-2 On Coherent Combining of Distributed Observations 1:55 PM
Jakob Hoydis, Supelec; Thorsten Wild, Stephan ten Brink, Bell Laboratories, Alcatel-Lucent; Mérouane Debbah, Supelec
- MP3a-3 Measured Propagation Characteristics for Very Large MIMO at 2.6 GHz 2:20 PM
Xiang Gao, Fredrik Tufvesson, Ove Edfors, Fredrik Rusek, Lund University
- MP3a-4 Decentralized (Cell-Free) Large-Scale Antenna System 2:45 PM
Alexei Ashikhmin, Thomas L Marzetta, Bell Laboratories, Alcatel-Lucent; Hong Yang, Alcatel-Lucent

Session MP3b Coordinated Multipoint (invited)

Chair: *Wing-Kin Ma, The Chinese University of Hong Kong*

- MP3b-1 A Decentralized Method for Joint Admission Control and Beamforming in Coordinated Multicell Downlink 3:30 PM
Hoi-To Wai, Wing-Kin Ma, Chinese University of Hong Kong
- MP3b-2 Analyzing the IA Feasibility Problem via New Tools from Algebraic Geometry 3:55 PM
Liangzhong (Steven) Ruan, Vincent Lau, Hong Kong University of Science and Technology
- MP3b-3 Design of Coordinated Multi-Point (CoMP) Transmission and Reception Schemes for the 4G Cellular Downlink 4:20 PM
Narayan Prasad, NEC Laboratories America, Inc.; Ali Tajer, Princeton University; Xiaodong Wang, Columbia University
- MP3b-4 Joint Transceiver Design and Base Station Clustering for Heterogeneous Networks 4:45 PM
Mingyi Hong, Meisam Razaviyayn, Ruoyu Sun, Zhi-Quan Luo, University of Minnesota

Session MP4a Cognitive Radio Networks (invited)

Chair: Visa Koivunen, Aalto University

- | | | |
|--------|--|---------|
| MP4a-1 | Cooperative Compressive Wideband Power Spectrum Sensing
<i>Dyonisius Dony Ariananda, Geert Leus, Delft University of Technology</i> | 1:30 PM |
| MP4a-2 | On Hybrid Cooperation in Underlay Cognitive Radio Networks
<i>Nurul Huda Mahmood, Norwegian University of Science and Technology; Ferkan Yilmaz, King Abdullah University of Science and Technology; Geir Egil Øien, Norwegian University of Science and Technology; Mohamed-Slim Alouini, King Abdullah University of Science and Technology</i> | 1:55 PM |
| MP4a-3 | Sequential Good Channel Search for Multi-channel Cognitive Radio
<i>Raied Caromi, Seshadri Mohan, University of Arkansas, Little Rock; Lifeng Lai, Worcester Polytechnic Institute</i> | 2:20 PM |
| MP4a-4 | A Sensing Policy Based on Confidence Bounds and a Restless Multi-armed Bandit Model
<i>Jan Oksanen, Visa Koivunen, Aalto University; H. Vincent Poor, Princeton University</i> | 2:45 PM |

Session MP4b Machine-to-Machine Communications and Networks (invited)

Chair: KC Chen, National Taiwan University

- | | | |
|--------|--|---------|
| MP4b-1 | Not Every Bit Counts: Shifting the Focus from Machine to Data for Machine-to-Machine Communications
<i>Chih-Hua Chang, Hung-Yun Hsieh, Hsuan-Jung Su, National Taiwan University</i> | 3:30 PM |
| MP4b-2 | Exploring Utility-based Optimization and Management for Wireless Sensor Networks and Machine-to-Machine Communications
<i>Petri Mähönen, Janne Riihijarvi, RWTH Aachen University</i> | 3:55 PM |
| MP4b-3 | Controlling Access Overload and Signaling Congestion in M2M Networks
<i>Rath Vannithamby, Intel Corporation</i> | 4:20 PM |
| MP4b-4 | Dynamic Spectrum Allocation under Cognitive Cellular Network for M2M Applications
<i>Qing Wang, IBM Research China; Bongjun Ko, IBM T. J. Watson Research Laboratory; Kwang-Cheng Chen, National Taiwan University; Junsong Wang, IBM Research China; Ting He, IBM T. J. Watson Research Laboratory; Yonghua Lin, IBM Research China; Kangwon Lee, IBM T. J. Watson Research Laboratory</i> | 4:45 PM |

Session MP5a Image and Video Coding (invited)

Chair: *Marios Pattichis, University of New Mexico*

- | | | |
|--------|--|---------|
| MP5a-1 | Dynamically Reconfigurable AVC
Deblocking Filter with Power and Performance
Constraints
<i>Yuebing Jiang, Marios Pattichis, University of New Mexico</i> | 1:30 PM |
| MP5a-2 | On the Use of Image Quality Estimators for
Improved JPEG2000 Coding
<i>Thien Phan, Phong Vu, Damon Chandler, Oklahoma State University</i> | 1:55 PM |
| MP5a-3 | Blind Quality Assessment of Videos Using a
Model of Natural Scene Statistics and Motion
Coherency
<i>Michele Saad, Al Bovik, University of Texas at Austin</i> | 2:20 PM |
| MP5a-4 | The Emerging High Efficiency Video Coding
Standard for Developing Wireless Ultrasound Video
Telemedicine Systems
<i>Andreas Panayides, Zinon Antoniou, University of Cyprus;
Marios Pattichis, University of New Mexico; Constantinos
Pattichis, University of Cyprus</i> | 2:45 PM |

Session MP5b Convex Optimization in Image and Video Analysis (invited)

Chair: *Vishal Monga, Penn State University*

- | | | |
|--------|---|---------|
| MP5b-1 | Compressive Sensing and Sparse Array
Processing
<i>P. P. Vaidyanathan, California Institute of Technology</i> | 3:30 PM |
| MP5b-2 | Single-Image Super-Resolution Using
Multihypothesis Prediction
<i>Chen Chen, James Fowler, Mississippi State University</i> | 3:55 PM |
| MP5b-3 | L-infinity Regularized Models for
Segmentation, Cartoon-Texture Decomposition, and
Image Restoration
<i>Hayden Schaeffer, Luminita Vese, University of California, Los Angeles</i> | 4:20 PM |
| MP5b-4 | Implicit Gibbs Prior Models for Tomographic
Reconstruction
<i>Pengchong Jin, Eri Haneda, Charles Bouman, Purdue University</i> | 4:45 PM |

Session MP6a Computer Arithmetic (invited)

Chair: *Michael Schulte, AMD Research and University of Wisconsin*

- | | | |
|--------|---|---------|
| MP6a-1 | Shared Implementation of Radix-10 and
Radix-16 Square Root Algorithm with Limited
Precision Primitives
<i>Milos D. Ercegovac, University of California, Los Angeles; Robert McIlhenny, Californi State University Northridge</i> | 1:30 PM |
| MP6a-2 | Decimal On-line Multioperand Addition
<i>Carlos Garcia-Vega, Sonia Gonzalez-Navarro, Julio Villalba, Emilio L. Zapata, University of Malaga</i> | 1:55 PM |

- | | | |
|--------|---|---------|
| MP6a-3 | Variable-Accuracy Multiplication Using Approximate Binary Logarithms and Parallel Error Correction
<i>Michael Sullivan, Earl Swartzlander, University of Texas at Austin</i> | 2:20 PM |
| MP6a-4 | Experiments with Multiplier Reduction Trees
<i>Neil Burgess, David Lutz, ARM</i> | 2:45 PM |

Session MP6b Reconfigurable Architectures, Many-Core, Multi-Core, and SoC (invited)

Chair: *Neil Burgess, ARM*

- | | | |
|--------|---|---------|
| MP6b-1 | FPGA-based Processor Solution for Front-End Image Detection Applications
<i>Colm Kelly, Thales Air Defence Limited; Roger Woods, Queen's University Belfast</i> | 3:30 PM |
| MP6b-2 | Is There a Smarter Way to Use 100 Billion Transistors?
<i>Muhammad Usman Khan, Francis Li, Ying Tiong, Michael Liebelt, Brian Ng, Braden Phillips, University of Adelaide</i> | 3:55 PM |
| MP6b-3 | Performance and Power Optimizations for Accelerated Processing Units
<i>Michael Schulte, AMD</i> | 4:20 PM |
| MP6b-4 | Reliable Low Power Distributed Arithmetic Filters via N-modular Redundancy
<i>Muhammad S. Khairy, AmirHossein Gholamipour, Fadi J. Kurdahi, Ahmed M. Eltawil, University of California, Irvine</i> | 4:45 PM |

Session MP7a Medical Image Analysis

Chair: *Alejandro F. Frangi, Alejandro F Frangi, University of Sheffield, Sheffield, UK; Universitat Pompeu Fabra, Barcelona, Spain*

- | | | |
|--------|---|---------|
| MP7a-1 | 4D Signal Processing for Spatio-Temporal Analysis of Longitudinal 3D Imagery
<i>Guido Gerig, University of Utah</i> | 1:30 PM |
| MP7a-2 | Computational Diffusion MRI: On Some Recent Advances and Beyond
<i>Rachid Deriche, INRIA Sophia Antipolis</i> | 1:55 PM |
| MP7a-3 | Analytics for Time-Varying Catheterization Imaging Data: A Probabilistic Approach
<i>Ioannis Kakadiaris, University of Houston</i> | 2:20 PM |
| MP7a-4 | Estimating 3D Tongue Motion with MR Images
<i>Fangxu Xing, Junghoon Lee, Johns Hopkins University; Emi Z. Murano, University of Maryland; Jonghye Woo, Johns Hopkins University; Maureen Stone, University of Maryland Dental School; Jerry Prince, Johns Hopkins University</i> | 2:45 PM |

Session MP7b Biological Modeling and Signal Analysis (partly invited)

Chair: *Scott T. Acton, University of Virginia*

- | | | |
|--------|---|---------|
| MP7b-1 | Cell Mechanics Analysis by
Physically-Constrained Optical Flow
<i>Jean-Christophe Olivo-Marin, Timothee Lecomte,
Alexandre Dufour, Nancy Guillen, Roman Thibaux,
Institut Pasteur</i> | 3:30 PM |
| MP7b-2 | Exploitation of Radar Doppler Signatures for
Gait Analysis
<i>Jennifer Palmer, Kristin Bing, Amy Sharma, Georgia Tech
Research Institute</i> | 3:55 PM |
| MP7b-3 | A Third-Order Approximate Solution of the
EEG Forward Problem in Four-Shell Ellipsoidal
Geometry
<i>D. Gutiérrez, M. Alcocer-Sosa, Center of Research and
Advanced Studies</i> | 4:20 PM |
| MP7b-4 | Phase Congruency Singular Value
Decomposition for Multi-Scale Neuron
Enhancement
<i>Emmanuel Denloye-Ito, Scott Acton, University of Virginia</i> | 4:45 PM |

Session MP8a1 MIMO Communications and Signal Processing I

Chair: *Andreas Burg, Ecole Polytechnique Federale de Lausanne (EPFL)*

1:30 PM - 3:10 PM

- | | |
|---------|--|
| MP8a1-1 | Low-Complexity Vector Precoding for Multi-user
Systems
<i>Maitane Barrenechea, University of Mondragon; Andreas
Burg, École Polytechnique Fédérale de Lausanne; Mikel
Mendicute, University of Mondragon</i> |
| MP8a1-2 | Non-Binary Coded Modulation and Iterative Detection
for High Spectral Efficiency in MIMO
<i>Nicholas Chang, David Romero, MIT Lincoln Laboratory</i> |
| MP8a1-3 | Low-Complexity Lattice Reduction-Aided Channel
Inversion Methods for Large Multi-User MIMO Systems
<i>Keke Zu, Rodrigo C. de Lamare, University of York;
Martin Haardt, Ilmenau University of Technology</i> |
| MP8a1-4 | Multiuser Detection Performance in Multibeam Satellite
Links under Imperfect CSI
<i>Jesús Arnau, Carlos Mosquera, University of Vigo</i> |
| MP8a1-5 | On Convergence Constraint Precoder Design for Iterative
Frequency Domain Multiuser SISO Detector
<i>Valtteri Tervo, Antti Tölli, University of Oulu; Juha
Karjalainen, Renesas Mobile Europe Oy; Tad Matsumoto,
Japan Advanced Institute of Science and Technology</i> |
| MP8a1-6 | Grassmannian Packings from Orbits of Projective Group
Representations
<i>Renaud-Alexandre Pitaval, Olav Tirkkonen, Aalto
University</i> |

- MP8a1-7 Volume of Ball and Hamming-type Bounds for Stiefel Manifold with Euclidean Distance
Renaud-Alexandre Pitaval, Olav Tirkkonen, Aalto University
- MP8a1-8 Distributed Resource Allocation for MISO Downlink Systems via the Alternating Direction Method of Multipliers
Satya Joshi, Marian Codreanu, Matti Latva-aho, Centre for Wireless Communications
- MP8a1-9 Max-Rate MIMO Broadcast DFE Transceiver Design under Power and SER Constraints
Chih-Hao Liu, P. P. Vaidyanathan, California Institute of Technology
- MP8a1-10 Performance of Asymmetric Antenna Configurations in Polarized Channels
Robert Severinghaus, Murali Tummala, John McEachen, Naval Postgraduate School
- MP8a1-11 On Robust Training Sequence Design for Correlated MIMO Channel Estimation
Nafiseh Shariati, KTH Royal Institute of Technology; Jiaheng Wang, Southeast University; Mats Bengtsson, KTH Royal Institute of Technology
- MP8a1-12 The Proportional Fair Sharing Algorithm under i.i.d. Models
Matthew Pugh, University of California, San Diego

Session MP8a2 Signal Processing and Adaptive Systems I

Chair: *Lu Chun-Shien, Institute of Information Science, Academia Sinica*

1:30 PM - 3:10 PM

- MP8a2-1 Fast Compressed Image Sensing Based on Sampling Matrix Design
Chun-Shien Lu, Hung-Wei Chen, Sung-Hsien Hsieh, Academia Sinica
- MP8a2-2 Particle Filtering for Multivariate State-Space Models
Petar M Djuric, Monica F. Bugallo, Stony Brook University
- MP8a2-3 Extracting Atmospheric Profiles from Hyperspectral Data with Particle Filters
Dustin Rawlings, Jacob Gunther, Todd Moon, Utah State University
- MP8a2-4 Using Dictionary Learning for Improving Hyperspectral Pixel Classification
Andrew Pound, Jacob Gunther, Todd K. Moon, Utah State University; Gustavious P. Williams, Brigham Young University
- MP8a2-5 Fault Localization in Smart Grid Using Wavelet Analysis and Unsupervised Learning
Huaiguang Jiang, Jun Zhang, Wenzhong Gao, University of Denver

- MP8a2-6 Sensitivity of Polynomial Composition and Decomposition for Signal Processing Applications
Sefa Demirtas, Guolong Su, Alan V. Oppenheim, Massachusetts Institute of Technology
- MP8a2-7 A Variable Regularization Control Method for NLMS Algorithm
Junghsi Lee, Hsu-Chang Huang, Yuan-Ze University
- MP8a2-8 Electromagnetic Field Recognition for Proactive Robot Communication Connectivity Maintenance
Mustafa Ayad, Jun Jason Zhang, Richard Voyles, Mohammad Mahoor, University of Denver
- MP8a2-9 A Data Reusage Algorithm Based on Incremental Combination of LMS Filters
Luiz Chamon, Humberto Ferro, Cássio Lopes, University of São Paulo
- MP8a2-10 Superresolution by Compressive Sensing Algorithms
Albert Fannjiang, Wenjing Liao, University of California, Davis
- MP8a2-11 Compressive Ladar Detector Noise Performance
Darryl Sale, Christopher J. Rozell, Justin Romberg, Aaron D. Lanterman, Georgia Institute of Technology
- MP8a2-12 Rank Property of the MIMO Gaussian Wiretap Channel with an Average Power Constraint
Ali Fakoorian, A. Lee Swindlehurst, University of California, Irvine
- MP8a2-13 Nonlinear System Identification Using Compressed Sensing
Manjish Naik, Douglas Cochran, Arizona State University
- MP8a2-14 The Resolution of Derived Secondary Information from Filter Banks May Not Follow Directly from the Signal Models
Victor DeBrunner, Guifeng Liu, Florida State University
- MP8a2-15 MIMO Radar Spatial Compressive Sensing with Unknown Parameters
Marco Rossi, Alexander M. Haimovich, New Jersey Institute of Technology; Yonina C. Eldar, Technion, Israel Institute of Technology
- MP8a2-16 Classification of Multivariate Data Using Dirichlet Process Mixture Models
Petar M Djuric, Stony Brook University; Andre Ferrari, Universite de Nice-Sophia Antipolis
- MP8a2-17 Compressed Sensing Radar Amid Noise and Clutter
Peter Tuuk, S. Lawrence Marple, Georgia Tech Research Institute

Session TA1a MIMO in Optical Communications (invited)

Chair: *Peter Winzer, Alcatel-Lucent*

- | | | |
|--------|---|---------|
| TA1a-1 | Physical Layer Security in Space-Division Multiplexed Fiber Optic Communications
<i>Kyle Guan, Emina Soljanin, Peter Winzer, Bell Laboratories, Alcatel-Lucent</i> | 8:15 AM |
|--------|---|---------|

TA1a-2	Modeling of Linear and Nonlinear Coupling in Multiple-Mode Fiber Optic Transmission with MIMO Signal Processing <i>Cristian Antonelli, Antonio Mecozzi, University of L'Aquila; Mark Shtaiif, Tel Aviv University</i>	8:40 AM
TA1a-3	Mode Coupling in Coherent Mode-Division-Multiplexed Systems: Impact on Capacity and Signal Processing Complexity <i>Joseph Kahn, Stanford University; Keang-Po Ho, Silicon Image</i>	9:05 AM
TA1a-4	Experimental Characterization of the Fiber-Optic MIMO Channel <i>Sebastian Randel, Roland Ryf, Peter Winzer, Bell Laboratories, Alcatel-Lucent</i>	9:30 AM

Session TA1b Wireless Video Transmission Systems (invited)

Chair: *Andreas Molish, University of Southern California*

TA1b-1	Enhanced Adaptive Streaming over LTE-Advanced Wireless Networks <i>Jeff Foerster, Intel</i>	10:15 AM
TA1b-2	Subcarrier Mapping Based on Slice Visibility for Video Transmission over OFDM Channels <i>Laura Toni, Pamela C. Cosman, Laurence B. Milstein, University of California, San Diego</i>	10:40 AM
TA1b-3	An Online Learning Framework for Perceptually Optimized Adaptive Video Transmission <i>Amin Abdel Khalek, University of Texas at Austin; Constantine Caramanis, Robert W. Heath, Jr., The University of Texas at Austin</i>	11:05 AM
TA1b-4	Device-to-Device Communications for Wireless Video Delivery <i>Negin Golrezaei, Alexandros Dimakis, Andreas F. Molisch, University of Southern California</i>	11:30 AM

Session TA2a Game Theory in Communications (invited)

Co-Chairs: *Marco Luise, University of Pisa and Giacomo Bacci, University of Pisa*

TA2a-1	Distributed Spectrum Sharing Policies for Selfish Users with Imperfect Monitoring Ability <i>Yuanzhang Xiao, Mihaela van der Schaar, University of California, Los Angeles</i>	8:15 AM
TA2a-2	Energy Efficiency Games in Cloud Computing for Wireless Networks <i>Tao Lin, Tansu Alpcan, Arun Vishwanath, University of Melbourne</i>	8:40 AM
TA2a-3	Mean Field Energy Games in Wireless Networks <i>François Mériaux, Laboratoire des Signaux et Systèmes (L2S); Vineeth S Varma, Orange Labs; Samson Lasaulce, Laboratoire des Signaux et Systèmes (L2S)</i>	9:05 AM

TA2a-4	Learning Efficient Satisfaction Equilibrium via Trial and Error in Decentralized Wireless Networks <i>Samir Perlaza, Princeton University; Zhu Han, University of Houston; H. Vincent Poor, Princeton University</i>	9:30 AM
--------	---	---------

Session TA2b Coding Theory for the Next-Generation Storage Systems (invited)

Chair: *Lara Dolecek, University of California, Los Angeles*

TA2b-1	Content-assisted File Decoding for Nonvolatile Memories <i>Anxiao Jiang, Yue Li, Yue Wang, Texas A&M University; Jehoshua Bruck, California Institute of Technology</i>	10:15 AM
TA2b-2	LDPC Codes on Euclidean Geometries: Trapping Set Structure <i>Qiuju Diao, Ying Tai, Shu Lin, Khaled Abdel-Ghaffar, University of California, Davis</i>	10:40 AM
TA2b-3	Covering Codes for Multilevel Flash Memories <i>Kathryn Haymaker, Christine Kelley, University of Nebraska-Lincoln</i>	11:05 AM
TA2b-4	Comparison of ECC Performance on MLC and TLC Flash Memories <i>Paul H. Siegel, Brian K. Butler, Scott Kayser, Eitan Yaakobi, Xiaojie (Eric) Zhang, University of California, San Diego</i>	11:30 AM

Session TA3a Multiuser and Massive MIMO (invited)

Chair: *Nihar Jindal, Broadcom*

TA3a-1	Downlink Outage Probability in MIMO HetNets <i>Harpreet S. Dhillon, University of Texas at Austin; Marios Kountouris, École supérieure d'électricité; Jeff Andrews, University of Texas at Austin</i>	8:15 AM
TA3a-2	Coverage and Capacity in mmWave MIMO Systems <i>Salam Akoum, Omar El Ayach, Robert W. Heath, University of Texas at Austin</i>	8:40 AM
TA3a-3	A Millimeter-Wave Massive MIMO System for Next Generation Mobile Broadband <i>Zhouyue Pi, Jianzhong Zhang, Farooq Khan, Samsung Corp.</i>	9:05 AM
TA3a-4	Towards Improving LTE SU/MU-MIMO Performance: Issues in Channel Estimation, Interpolation and Feedback <i>Ozgun Y. Bursalioglu, Sean A. Ramprasad, Haralabos C. Papadopoulos, NTT DoCoMo Labs</i>	9:30 AM

Session TA3b Compressive Estimation

Chair: *Wee Peng Tay, Nanyang Technological University, Singapore*

- | | | |
|--------|---|----------|
| TA3b-1 | Compressive Estimation in AWGN: General Observations and a Case Study
<i>Dinesh Ramasamy, Sriram Venkateswaran, Upamanyu Madhow, University of California, Santa Barbara</i> | 10:15 AM |
| TA3b-2 | On Application of LASSO for Sparse Support Recovery with Imperfect Correlation Awareness
<i>Piya Pal, P. P. Vaidyanathan, California Institute of Technology</i> | 10:40 AM |
| TA3b-3 | Compressive Multiplexers for Correlated Signals
<i>Ali Ahmed, Justin Romberg, Georgia Institute of Technology</i> | 11:05 AM |
| TA3b-4 | Optimal Acquisition Policy for Compressed Measurements with Limited Observations
<i>Sourabh Bhattacharya, Ashutosh Nayyar, Tamer Basar, University of Illinois, Urbana-Champaign</i> | 11:30 AM |

Session TA4a Social Networks (invited)

Chair: *Patrick Wolfe, Harvard University*

- | | | |
|--------|---|---------|
| TA4a-1 | Hub Discovery in Partial Correlation Graphical Models
<i>Al Hero, University of Michigan</i> | 8:15 AM |
| TA4a-2 | Geometric Network Analysis Tools
<i>Michael Mahoney, Stanford University</i> | 8:40 AM |
| TA4a-3 | Learning over Social Networks via Diffusion Adaptation
<i>Xiaochuan Zhao, Ali Sayed, University of California, Los Angeles</i> | 9:05 AM |
| TA4a-4 | Large Networks of Dynamic Agents: Consensus under Adversarial Disturbances
<i>Dario Bauso, Tamer Basar, University of Illinois, Urbana-Champaign</i> | 9:30 AM |

Session TA4b Signal Processing for Cyber-Security and Privacy in Networks (invited)

Chair: *Lalitha Sankar, Arizona State University*

- | | | |
|--------|---|----------|
| TA4b-1 | Secure Estimation in Cyber-Physical Systems
<i>Yilin Mo, Bruno Sinopoli, Carnegie Mellon University</i> | 10:15 AM |
| TA4b-2 | Analyzing Privacy and Utility Using Axioms
<i>Daniel Kifer, Bing-Rong Lin, Penn State University</i> | 10:40 AM |
| TA4b-3 | Quantifying the Delay-Privacy Trade-off in the Design of a Scheduling Policy
<i>Sachin Kadloor, Negar Kiyavash, University of Illinois, Urbana-Champaign; Parv Venkitasubramaniam, Lehigh University</i> | 11:05 AM |
| TA4b-4 | A Formal Framework for Joint Privacy and Security Modeling and Analysis in Data and Communication Networks
<i>John Baras, University of Maryland</i> | 11:30 AM |

Session TA5a 3D Video Processing (invited)

Chair: *Patrick Le Callet, Polytech'Nantes Université de Nantes*

- | | | |
|--------|---|---------|
| TA5a-1 | Full-Reference Quality Assessment of Stereoscopic Images by Modeling Binocular Rivalry
<i>Ming-Jun Chen, Che-Chun Su, University of Texas at Austin; Do-Kyoung Kwon, Texas Instruments; Lawrence K. Cormack, Alan Bovik, University of Texas at Austin</i> | 8:15 AM |
| TA5a-2 | Visual Quality in Stereoscopic 3DTV
<i>Ramanathan Palaniappan, Nikil Jayant, Georgia Institute of Technology; Pravin Mane, VQLink</i> | 8:40 AM |
| TA5a-3 | Depth Map Estimation in DIBR Stereoscopic 3D Videos Using a Combination of Monocular Cues
<i>Mohammed Aabed, Dogancan Temel, Ghassan AlRegib, Georgia Institute of Technology</i> | 9:05 AM |
| TA5a-4 | Perceptual Depth Indicator for S-3D Content Based on Binocular and Monocular cues
<i>Pierre Lebreton, Alexander Raake, Telekom Innovation Laboratories; Marcus Barkowsky, Patrick Le Callet, LUNAM Université, Université de Nantes</i> | 9:30 AM |

Session TA5b Computer Arithmetic Accelerators for Signal Processing

Chair: *Roger Woods, Queen's University Belfast*

- | | | |
|--------|--|----------|
| TA5b-1 | Imprecise Arithmetic for Low Power Image Processing
<i>Pietro Albicocco, Gian Carlo Cardarilli, University of Rome Tor Vergata; Alberto Nannarelli, Technical University of Denmark; Massimo Petricca, Marco Re, University of Rome Tor Vergata</i> | 10:15 AM |
| TA5b-2 | Linearization Using Efficient Complex Polynomial Evaluations
<i>Pouya Dormiani, Milos Ercegovac, University of California, Los Angeles</i> | 10:40 AM |
| TA5b-3 | FPGA-Accelerated Simulation of Truncated-Matrix Multipliers
<i>George Walters, Penn State Erie, The Behrend College</i> | 11:05 AM |
| TA5b-4 | A Low-Power Dual-Path Floating-Point Fused Add-Subtract Unit
<i>Jae Hong Min, Jongwook Sohn, Earl E. Swartzlander, Jr., University of Texas at Austin</i> | 11:30 AM |

Session TA6a Low Power I (invited)

Chair: *James Stine, Oklahoma State University*

- | | | |
|--------|---|---------|
| TA6a-1 | Breaking the 3-D IC Power Delivery Wall
<i>Mircea Stan, Kaushik Mazumdar, University of Virginia</i> | 8:15 AM |
| TA6a-2 | A Review of QCA Adders and Metrics
<i>Weiqiang Liu, Maire O'Neill, Queen's University of Belfast; Earl Swartzlander, University of Texas at Austin</i> | 8:40 AM |

- | | | |
|--------|---|---------|
| TA6a-3 | Circuits for Ultra-low Power Millimeter-Scale Sensor Nodes: Progress, Opportunities, and Challenges
<i>Yoonmyung Lee, Dennis Sylvester, David Blaauw, University of Michigan</i> | 9:05 AM |
| TA6a-4 | Distributed Power Delivery for Energy Efficient and Low Power Systems
<i>Selcuk Kose, University of South Florida; Eby Friedman, University of Rochester</i> | 9:30 AM |

Session TA6b Low Power II (invited)

Chair: *James Stine, Oklahoma State University*

- | | | |
|--------|---|----------|
| TA6b-1 | The Energy-Efficiency of Asynchronous Architectures
<i>Rajit Manohar, Cornell University</i> | 10:15 AM |
| TA6b-2 | Optimized Low-Power Elementary Function Approximation for Chebyshev Series Approximations
<i>Masoud Sadeghian, Oklahoma State University; James Stine, Oklahoma State University</i> | 10:40 AM |
| TA6b-3 | Yield-Driven Minimum Energy CMOS Circuit Design
<i>Max Korbel, Dylan Stow, Chris Ferguson, David Harris, Harvey Mudd College</i> | 11:05 AM |
| TA6b-4 | Power Efficient Design of Parallel/Serial FIR Filters in RNS
<i>Massimo Petricca, Pietro Albicocco, Gian Carlo Cardarilli, University of Rome Tor Vergata; Alberto Nannarelli, Technical University of Denmark; Marco Re, University of Rome Tor Vergata</i> | 11:30 AM |

Session TA7a Biological Networks and Machine Learning (partly invited)

Chair: *Olgica Milenkovic, University of Illinois, Urbana-Champaign*

- | | | |
|--------|---|---------|
| TA7a-1 | Wavelet Packets Based Clustering for the Study of Functional Connectivity in the Rat Brain
<i>Alessio Medda, Georgia Institute of Technology; Shella Keilholz, Emory University School of Medicine</i> | 8:15 AM |
| TA7a-2 | Reconstructing a Sparse Matrix Using Row and Column Pooling
<i>Or Zuk, Broad Institute of MIT and Harvard</i> | 8:40 AM |
| TA7a-3 | Alignment of Multiple Biological Networks Based on Semi-Markov Random Walk Scores
<i>Sayed Mohammad Ebrahim Sahraeian, Byung-Jun Yoon, Texas A&M University</i> | 9:05 AM |
| TA7a-4 | Reducing the Number of Features for Seizure Prediction of Spectral Power in Intracranial EEG
<i>Yun Park, Brown University; Theoden Netoff, Keshab Parhi, University of Minnesota</i> | 9:30 AM |

Session TA7b Sequence and Genome Analysis (partly invited)

Chair: *Sharon Aviran, University of California, Berkeley*

- | | | |
|--------|--|----------|
| TA7b-1 | Sparse Inference of Regulatory Networks
Using Information-Theoretic Methods
<i>Mo Deng, Amin Emad, Olgica Milenkovic, University of
Illinois, Urbana-Champaign</i> | 10:15 AM |
| TA7b-2 | Structural Stabilization of RNA-Protein
Binding Sites through High Linkage SNPs
<i>Matthew Halvorsen, Joshua S. Martin, Wes Sanders,
Justin Ritz, Alain Laederach, University of North
Carolina, Chapel Hill</i> | 10:40 AM |
| TA7b-3 | Detection of Antipodal Persistence in Large
Scale Differential Gene Expression Experiments
<i>Alfred Hero, Robert Brown, Hamed Firouzi, University of
Michigan, Ann Arbor</i> | 11:05 AM |
| TA7b-4 | Efficient Genotyping of Individuals Using
Overlapping Pool Sequencing and Imputation
<i>Farhad Hormozdiari, Zhanyong Wang, Wen-Yun Yang,
Eleazar Eskin, University of California, Los Angeles</i> | 11:30 AM |

Session TA8a1 Array Signal Processing II

Chair: *Peter Gerstoft, University of California San Diego*

8:15 AM - 9:55 AM

- | | |
|---------|---|
| TA8a1-1 | An Analytical Framework for Transmit Beamforming
with Peak Power Constraint
<i>Zhenhua Yu, Xiaoli Ma, G. Tong Zhou, Georgia Institute
of Technology</i> |
| TA8a1-2 | On the Applicability of Source Localization Techniques
to Passive Multistatic Radar
<i>Daniel Hack, Lee Patton, Matrix Research, Inc.; Braham
Himed, Michael Saville, Air Force Research Laboratory</i> |
| TA8a1-3 | Sparse Frequency Diverse MIMO Radar Imaging
<i>Changchang Liu, Weidong Chen, University of Science
and Technology of China</i> |
| TA8a1-4 | EEG Source Localization Using Beamforming in
Energy-Constrained Regions
<i>D. Gutiérrez, C. C. Zaragoza-Martínez, Center of
Research and Advanced Studies</i> |
| TA8a1-5 | Hybrid Cramer-Rao Lower Bound for Sniper
Localization via a Helicopter-Based Acoustic Array
<i>Lou Fertig, Georgia Tech Research Institute</i> |
| TA8a1-6 | A ML Localizer of Multiple Radar Targets
<i>Francesco Bandiera, Michele Mancino, Giuseppe Ricci,
University of Salento; Danilo Orlando, ELETTRONICA
S.p.A.</i> |
| TA8a1-7 | Recursive Updating Algorithm for Robust Capon
Beamforming with Steering Vector Mismatches
<i>Evgeny Mavrychev, Nizhniy Novgorod State Technical
University</i> |

- TA8a1-8 A Generalized Sinusoidal Frequency Modulated
Waveform for Active Sonar
*David Hague, John Buck, University of Massachusetts
Dartmouth*
- TA8a1-9 Consistent Linear Tracker with Position and Range Rate
Measurements
*Steven Bordonaro, Naval Undersea Warfare Center; Peter
Willett, Yaakov Bar-Shalom, University of Connecticut*
- TA8a1-10 Joint Adaptive Beamforming and Echo Cancellation
Using a Non Reference Anchor Array Framework
*Karan Nathwani, Rajesh Hegde, Indian Institute of
Technology Kanpur*
- TA8a1-11 Tensor Decompositions with Vandermonde Factor and
Applications in Signal Processing
Mikael Sorensen, Lieven De Lathauwer, KU Leuven
- TA8a1-12 A Correction and Generalization to the Sparse Learning
via Iterative Minimization Method for Target off the Grid
in MIMO Radar Imaging
*Changchang Liu, Li Ding, Weidong Chen, University of
Science and Technology of China*
- TA8a1-13 Synthetic Beamforming with Distributed Digital
Subarrays
Bo-Kai Feng, David Jenn, Naval Postgraduate School
- TA8a1-14 Velocity Spectrum Analysis in Seismic Prospecting
Combining Detection Principles, Beam-space Techniques
and Coherent Signal-Subspace Processing
*Rafael Krummenauer, Martin Tygel, Amauri Lopes,
University of Campinas*
- TA8a1-15 Cooperative Localization in Wireless Networks under
Bandwidth Constraints
*Panos Alevizos, Nikos Fasarakis-Hilliard, Aggelos
Bletsas, Technical University of Crete*
- TA8a1-16 Cramer-Rao Lower Bounds for Estimation of Phase in
LBI Based Localization Systems
*Mohammad Pourhomayoun, Mark Fowler, Binghamton
University*

Session TA8a2 Signal Processing and Adaptive Systems II

Chair: *Nascimento Vitor, Univ. of Sao Paulo*

8:15 AM - 9:55 AM

- TA8a2-1 Comparison of Least Mean Fourth and Least Mean
Square Tracking
Eweda Eweda, National Knowledge Center, Abu Dhabi
- TA8a2-2 Extending MC-SURE to Denoise Sensor Data Streams
*Mandoye Ndoye, Chandrika Kamath, Lawrence Livermore
National Laboratory*
- TA8a2-3 Improved Robustness and Accelerated Power Amplifier
Identification with Adaptive Wiener Models in the
Complex Domain
*Robert Dallinger, Markus Rupp, Vienna University of
Technology*

- TA8a2-4 Efficient FFT Based Comb Filtering without Doing the FFT
Jim Rasmussen, The MITRE Corporation
- TA8a2-5 A Connection-Constraint Algorithm for a Sparse Adaptive Photonic Filter
Suk-seung Hwang, Chosun University; John J. Shynk, University of California, Santa Barbara
- TA8a2-6 Discriminative Dictionary Learning via Mutual Exclusion
Raghu Raj, U.S. Naval Research Laboratory
- TA8a2-7 Convergence Analysis of Clipped Input Adaptive Filters Applied to System Identification
Mehdi Bekrani, Andy W. H. Khong, Nanyang Technological University
- TA8a2-8 Sparse RLS Adaptive Filter with Diagonal Loading
Yuriy Zakharov, University of York; Vitor Nascimento, University of São Paulo
- TA8a2-9 Distributed Consensus Based Joint Resource and Routing Optimization in Wireless Sensor Networks
Markus Leinonen, Marian Codreanu, Markku Juntti, University of Oulu
- TA8a2-10 Tracking Analysis of the ϵ -NSRLMMN Algorithm
Mohammed Faiz, Azzedine Zerguine, King Fahd University of Petroleum and Minerals
- TA8a2-11 Homotopy algorithm Using Dichotomous Coordinate Descent Iterations for Sparse Recovery
Yuriy Zakharov, University of York; Vitor Nascimento, University of São Paulo
- TA8a2-12 Hirschman Uncertainty Using Rényi, Instead of Shannon, Entropy is Invariant to the Rényi Entropy Order
Kirandeep Ghuman, Victor DeBrunner, Florida State University
- TA8a2-13 Joint Distributed Parameter and Channel Estimation in Wireless Sensor Networks via Variational Inference
Aitzaz Ahmad, Erchin Serpedin, Hazem Nounou, Mohamed Nounou, Texas A&M University
- TA8a2-14 Performance Analysis for 2-D Convolution Implemented with the 2-D Modified Discrete Fourier Transform
Chandrashekar Radhakrishnan, University of Illinois; William Jenkins, Pennsylvania State University

Session TA8b1 Communication Systems II

Chair: *Yao Xie, Duke University*

10:15 AM - 12:00 PM

- TA8b1-1 Experimental Analysis of Cyclostationary Detectors under Cyclic Frequency Offsets
Eric Rebeiz, Paulo Urriza, Danijela Cabric, University of California, Los Angeles
- TA8b1-2 Buffer Aware Power Control for Cognitive Radio Networks
Eman Naguib, Tamer Elbatt, Mohammed Nafie, Nile University

- TA8b1-3 Suboptimal Method for Pilot and Data Power Allocation in Combined Positioning and Communications OFDM Systems
Rafael Montalban, Gonzalo Seco-Granados, Universitat Autònoma de Barcelona; A. Lee Swindlehurst, University of California, Irvine
- TA8b1-4 Stochastic Online Learning under Unknown Time-Varying Models
Pouya Tehrani, Qing Zhao, University of California, Davis
- TA8b1-5 Spectrum Sensing Scheduling in a Cost-based Framework
Aditya Kelkar, Qi Cheng, Oklahoma State University
- TA8b1-6 The Optimal Fusion Rule for Cooperative Spectrum Sensing from a Diversity Perspective
Dongliang Duan, Liuqing Yang, Louis L. Scharf, Colorado State University
- TA8b1-7 Diffuse Mid-UV Communication in the Presence of Obscurants
Derek Young, Jerry Brewer, Jeannette Chang, Tina Chou, Jacques Kvam, Matthew Pugh, Sandia National Labs
- TA8b1-8 Quickest Search for Anomaly Detection
Sattar Vakili, Qing Zhao, University of California, Davis; Ananthram Swami, Army Research Laboratory
- TA8b1-9 Weighted Cyclic Prefix OFDM: PAPR Analysis and Performances Comparison with DFT-Precoding
Damien Roque, GIPSA-lab and DGA; Cyrille Siclet, Jean-Marc Brossier, GIPSA-lab; Pierre Siohan, Orange-Labs
- TA8b1-10 Predicting Spectrum Vacancy for Opportunistic Communications
David Browne, MIT Lincoln Laboratory
- TA8b1-11 Cross-Layer Transmission Rate/Power Policy for Cognitive Multi-Access Networks with Imperfect Sensing
Ghada Saleh, Amr El-Keyi, Mohammed Nafie, Nile University
- TA8b1-12 A Cross Layer Routing Protocol for Cognitive Radio Networks Using Channel Activity Tracking
Sandeep Gogineni, Syracuse University; Onur Ozdemir, ANDRO Computational Solutions; Engin Masazade, Chilukuri Mohan, Pramod Varshney, Syracuse University

Session TA8b2 MIMO Communications and Signal Processing II

Chair: *Ali Tajer, Princeton University*

10:15 AM - 12:00 PM

- TA8b2-1 Relaying and Base Station Cooperation: a Comparative Survey for Future Cellular Networks
Raphael Rolny, Marc Kuhn, Armin Wittneben, Swiss Federal Institute of Technology Zurich; Thomas Zasowski, Swisscom ICC

- TA8b2-2 A Feasibility Study on Opportunistic Interference Alignment: Limited Feedback and Sum-Rate Enhancement
Hyun Jong Yang, Stanford University; Won-Yong Shin, Dankook University; Bang Chul Jung, Gyeongsang National University; Arogyaswami Paulraj, Stanford University
- TA8b2-3 Joint Interference and Phase Alignment in Multiuser MIMO Interference Channels
Seyed Morteza Razavi, Tharmalingam Ratnarajah, Mathini Sellathurai, Queen's University Belfast
- TA8b2-4 User-Aided Sub-Clustering for CoMP Transmission: Feedback Overhead vs. Data Rate Trade-off
Lars Thiele, Fraunhofer Heinrich Hertz Institute
- TA8b2-5 Chance Constrained and Ergodic Robust QoS Power Minimization in the Satellite Downlink
Andreas Gründinger, Arailym Butabayeva, Michael Joham, Wolfgang Utschick, Technische Universität München
- TA8b2-6 Joint Channel and Data Estimation for MIMO Communications with Sparse Pilots
Yejian Chen, Stephan ten Brink, Bell Laboratories, Alcatel-Lucent
- TA8b2-7 Simulated Annealing User Scheduling for Coordinated Heterogeneous MIMO Networks
Hakimeh Purmehdi, Robert Elliott, Witold Krzymien, University of Alberta, and TRLabs
- TA8b2-8 Carrier-Cooperative Zero-Forcing for Power Minimization in Parallel MIMO Broadcast Channels
Stephan Herrmann, Christoph Hellings, Wolfgang Utschick, Technische Universität München
- TA8b2-9 Performance of MMSE Multi-antenna Receiver under Hierarchical Poisson Random Fields of Interferences
Wei Shi, James Ritcey, University of Washington
- TA8b2-10 Concurrent Training and Data Transmission in Multiple-Access Channels
Adriano Pastore, Javier Rodríguez Fonollosa, Universitat Politècnica de Catalunya
- TA8b2-11 Best and Worst-Case Statistics for Linear Beamforming in the MISO Correlated Broadcast Channel
Vasanthan Raghavan, University of Southern California; Stephen Hanly, Macquarie University
- TA8b2-12 From Single- to Multi-User Scheduling in LTE-A Uplink Exploiting Virtual MIMO
Martin Kurras, Lars Thiele, Fraunhofer Heinrich Hertz Institute

Session TA8b3 Architecture and Implementation of Signal Processing Systems

Chair: *Jörn W. Janneck, Lund University*

10:15 AM - 12:00 PM

- TA8b3-1 Receiver Implementations for Co-Channel Interference Suppression in MIMO-OFDM
Johanna Ketonen, Markku Juntti, University of Oulu
- TA8b3-2 Implementation of LS, MMSE and SAGE Channel Estimators for Mobile MIMO-OFDM
Johanna Ketonen, Markku Juntti, University of Oulu; Jari Ylioinas, Nokia Siemens Networks; Joseph R. Cavallaro, Rice University
- TA8b3-3 Low Complexity Opportunistic Decoder for Network Coding
Bei Yin, Michael Wu, Guohui Wang, Joseph R. Cavallaro, Rice University
- TA8b3-4 Sparse Polynomial Equalization of an RF Receiver via Algorithm, Analog, and Digital Codesign
Andrew Bolstad, Benjamin A. Miller, Karen Gettings, Mike Ericson, Helen Kim, Merlin Green, Dan Santiago, MIT Lincoln Laboratory
- TA8b3-5 Implementation of a QPSK Transceiver for Software Defined Radio on a Graphic Processing Unit (GPU)
Rehan Muzammil, M. Salim Beg, The Aligarh Muslim University; Mohsin M. Jamali, University of Toledo
- TA8b3-6 Karatsuba Implementation of FIR Filters
Pietro Albicocco, Gian Carlo Cardarilli, Salvatore Pontarelli, Marco Re, University of Rome Tor Vergata
- TA8b3-7 Real-Time Hardware Design for Improving Laser Detection and Ranging Accuracy
Jarrod Brown, Graduate Student; Clay Hughes, Linda DeBrunner, Florida State University
- TA8b3-8 Dataflow Programming in CAL—Balancing Expressiveness, Analyzability, and Implementability
Johan Eker, Ericsson Research; Jörn Janneck, Lund University

Session TP1a Network Optimization (invited)

Chair: *Atila Eryilmaz, Ohio State University*

- TP1a-1 Optimizing Transmissions for Wireless Video 1:30 PM
Michael Neely, Giuseppe Caire, University of Southern California
- TP1a-2 Gossip-Based Random Projection Algorithm 1:55 PM
for SVMs
Lee Soo Min, Angelia Nedich, University of Illinois, Urbana-Champaign
- TP1a-3 Random Hamiltonian Cycles with Random 2:20 PM
Link Deletions
Joohwan Kim, R. Srikant, University of Illinois, Urbana-Champaign

TP1a-4 Temporal Statistical Characterization of 2:45 PM
Interference for Joint Encoding and Random Access
*C. Emre Koksal, Atilla Eryilmaz, Nithin Sugavanam,
Oklahoma State University*

Session TP1b Distributed Signal Processing (invited)

Co-Chairs: *Hongbin Li, Stevens Institute of Technology and Jun
Fang, Stevens Institute of Technology*

TP1b-1 Gossip-based Distributed Stochastic 3:30 PM
Approximation: The Price of Non-double
Stochasticity

*Gemma Morral, Pascal Bianchi, Gersende Fort, Institut
Telecom / Telecom ParisTech / CNRS-LTCl; Jérémie
Jakubowicz, Institut Telecom / Telecom Sud Paris*

TP1b-2 Distributed Maximum a Posteriori Probability 3:55 PM
Estimation for Tracking of Dynamic Systems
*Felicia Jakubiec, Alejandro Ribeiro, University of
Pennsylvania*

TP1b-3 Identifying Multiple Infection Sources in a 4:20 PM
Network
*Wuqiong Luo, Wee Peng Tay, Nanyang Technological
University*

TP1b-4 Distributed Learning in Large Scale 4:45 PM
Multi-Agent Games: A Modified Fictitious Play
Approach
*Brian Swenson, Soumya Kar, Carnegie Mellon
University*

TP1b-5 An Iterative Precoding Approach for Joint 5:10 PM
Transmission of Distributed Correlated Sources
*Jun Fang, University of Electronic Science and
Technology of China; Hongbin Li, Stevens Institute of
Technology*

Session TP2a Consensus Based Algorithms

Chair: *Lara Dolecek, University of California, Los Angeles*

TP2a-1 Toward Resource-Optimal Averaging 1:30 PM
Consensus over the Wireless Medium
*Matthew Nokleby, Rice University; Waheed U. Bajwa,
Rutgers; Robert Calderbank, Duke University; Behnaam
Aazhang, Rice University*

TP2a-2 Distributed Average Consensus Using 1:55 PM
Bounded Transmissions
*Sivaraman Dasarathan, Mahesh Banavar, Cihan
Tepedelenlioglu, Andreas Spanias, Arizona State
University*

TP2a-3 Distributed Gram-Schmidt Orthogonalization 2:20 PM
Based on Dynamic Consensus
*Ondrej Sluciak, Vienna University of Technology; Hana
Strakova, University of Vienna; Markus Rupp, Vienna
University of Technology; Wilfried Gansterer, University
of Vienna*

TP2a-4 Simultaneous Distributed Sensor 2:45 PM
 Self-Localization and Target Tracking Using Belief
 Propagation and Likelihood Consensus
*Florian Meyer, Erwin Riegler, Ondrej Hlinka, Franz
 Hlawatsch, Vienna University of Technology*

Session TP2b Cooperative Adaptation and Learning (invited)

Co-Chairs: *Danilo Mandic, Imperial College and Ali Sayed,
 University of California, Los Angeles*

TP2b-1 Mean-Square Analysis of Continuous-Time 3:30 PM
 Distributed Estimation Strategies
*Vitor Nascimento, University of São Paulo; Ali Sayed,
 University of California, Los Angeles*

TP2b-2 Extrinsic Gossip and Reducing 3:55 PM
 Self-reinforcement in Distributed Consensus
*Andrew Bean, Angelia Nedich, Andrew Singer, University
 of Illinois, Urbana-Champaign*

TP2b-3 Non-linear Least Squares Estimation via 4:20 PM
 Network Diffusion
Simon Li, Anna Scaglione, University of California, Davis

TP2b-4 Fast Cooperative Distributed Learning 4:45 PM
*Dusan Jakovetic, Jose M F. Moura, Joao Xavier, Carnegie
 Mellon University*

TP2b-5 Exploiting the Noncircularity of Complex 5:10 PM
 Cooperative Learning Systems
Dahir Dini, Danilo Mandic, Imperial College London

Session TP3a Information Theoretic Signal Processing

Co-Chairs: *P. P. Vaidyanathan, California Institute of Technology
 and Piya Pal, California Institute of Technology*

TP3a-1 The Gaussian CEO Problem for a Scalar 1:30 PM
 Source with Memory: A Necessary Condition
*Jie Chen, Feng Jiang, Arnold Swindlehurst, University of
 California, Irvine*

TP3a-2 Empirical Rate-Distortion Study of 1:55 PM
 Compressive Sensing-based Joint Source-Channel
 Coding
*Muriel L. Rambeloarison, Soheil Feizi, Georgios
 Angelopoulos, Muriel Medard, Massachusetts Institute of
 Technology*

TP3a-3 Greedy Adaptive Measurements with Signal 2:20 PM
 and Measurement Noise
*Entao Liu, Edwin Chong, Louis Scharf, Colorado State
 University*

TP3a-4 Role of Bandwidth in the Quality of Inversion 2:45 PM
 of Linear Multirate Systems with Noise
*P. P. Vaidyanathan, Piya Pal, California Institute of
 Technology*

Session TP3b Underwater Communications (invited)

Chair: *Geert Leus, TU Delft*

- | | | |
|--------|--|---------|
| TP3b-1 | Differentially Coherent OFDM with Fractional FFT Demodulation
<i>Yashar M Aval, Millica Stojanovic, Northeastern University</i> | 3:30 PM |
| TP3b-2 | Channel Estimation for Multi-layer Block Transmissions over Underwater Acoustic Channels
<i>Srinivas Yerramalli, University of Southern California; Zijian Tang, Netherlands Organization for Applied Scientific Research; Urbashi Mitra, University of Southern California</i> | 3:55 PM |
| TP3b-3 | Outage Performance of a Multiuser Distributed Antenna System in Underwater Acoustic Channels
<i>Zhaohui Wang, Shengli Zhou, University of Connecticut; Zhengdao Wang, Iowa State University; Josko Catipovic, Naval Undersea Warfare Center; Peter Willett, University of Connecticut</i> | 4:20 PM |
| TP3b-4 | Underwater Channel Aware Routing
<i>Paolo Casari, Matteo Lazzarin, Michele Zorzi, University of Padova</i> | 4:45 PM |
| TP3b-5 | Soft-Adaptive Turbo Equalization- Using Soft Information in Adaptation
<i>Atulya Yellepeddi, Massachusetts Institute of Technology/ Woods Hole Oceanographic Institute; James Preisig, Woods Hole Oceanographic Institute</i> | 5:10 PM |

Session TP4a Decoding and Detection

Chair: *Rodrigo de Lamare, The University of York*

- | | | |
|--------|---|---------|
| TP4a-1 | Low-Complexity and Approximative Sphere Decoding of Sparse Signals
<i>Benjamin Knoop, Till Wiegand, Steffen Paul, University of Bremen</i> | 1:30 PM |
| TP4a-2 | Dynamic Threshold Schemes for Multi-Level Nonvolatile Memories
<i>Frederic Sala, Ryan Gabrys, Lara Dolecek, University of California, Los Angeles</i> | 1:55 PM |
| TP4a-3 | Iterative Detection and Decoding for MIMO Systems with Knowledge-Aided Belief Propagation Algorithms
<i>Jingjing Liu, Peng Li, Rodrigo de Lamare, University of York</i> | 2:20 PM |
| TP4a-4 | Quantization, Absorbing Regions and Practical Message Passing Decoders
<i>Behzad Amiri, University of California, Los Angeles; Shayan Garani Srinivasa, Western Digital Corporation; Lara Dolecek, University of California, Los Angeles</i> | 2:45 PM |

Session TP4b Smart Grid Communications and Networks (invited)

Co-Chairs: *Anna Scaglione, University of California, Davis and Zhifang Wang, University of California, Davis*

- | | | |
|--------|---|---------|
| TP4b-1 | Demand Response in Radial Distribution Networks
<i>Na Li, Lingwen Gan, Steven Low, California Institute of Technology; Lijun Chen, University of Colorado at Boulder</i> | 3:30 PM |
| TP4b-2 | Competitive Privacy in the Smart Grid
<i>Lalitha Sankar, Princeton University; Soumya Kar, Carnegie Mellon University; H. Vincent Poor, Princeton University</i> | 3:55 PM |
| TP4b-3 | Secure Network and Information Architectures for Smart Grid Data Analysis and Control
<i>Marina Thottan, Young Jin Kim, Gary Atkinson, Bell Laboratories, Alcatel-Lucent</i> | 4:20 PM |
| TP4b-4 | The Impact of Volatile Generation/Load Profile in Smart Grid on the Grid Vulnerability to Cascading Overload Failures
<i>Zhifang Wang, Anna Scaglione, University of California, Davis; Robert J. Thomas, Cornell University</i> | 4:45 PM |
| TP4b-5 | Power Resource Allocation in a Network of Fast Charging Stations
<i>George Michailidis, Michael Devetsikiotis, Safak Bayram, University of Michigan</i> | 5:10 PM |

Session TP5a Design Methodologies and Architectures for Communications

Chair: *Joseph R. Cavallaro, Rice University*

- | | | |
|--------|---|---------|
| TP5a-1 | High-Level Architecture Modeling and Exploration for Streaming Applications
<i>Usman Mazhar Mirza, Flavius Gruian, Lund University</i> | 1:30 PM |
| TP5a-2 | Sequential Decoding of Non-Binary LDPC Codes on Graphics Processing Units
<i>David Romero, Nicholas Chang, MIT Lincoln Laboratory</i> | 1:55 PM |
| TP5a-3 | A GPU Implementation of Belief Propagation Decoder for Polar Codes
<i>Bharath Kumar Reddy, Nitin Chandrakhodan, Indian Institute of Technology, Madras</i> | 2:20 PM |
| TP5a-4 | High Performance Efficient Parallel Nonbinary LDPC Decoding on GPU
<i>Guohui Wang, Hao Shen, Bei Yin, Yang Sun, Joseph R. Cavallaro, Rice University</i> | 2:45 PM |

Session TP5b Interference Alignment (invited)

Chair: *Tharm Ratnarajah, Queen's University Belfast*

- | | | |
|--------|---|---------|
| TP5b-1 | System-level Performance of Distributed Cooperation
<i>Ratheesh Mungara, Geordie George, Angel Lozano, Universitat Pompeu Fabra</i> | 3:30 PM |
| TP5b-2 | On the DoF of the Multiple-Antenna Time Correlated Interference Channel with Delayed CSIT
<i>Xinping Yi, David Gesbert, Eurecom Institute; Sheng Yang, Mari Kobayashi, École supérieure d'électricité</i> | 3:55 PM |
| TP5b-3 | Linear Transceiver Design for the Noisy Gaussian MIMO Interference Channel with Partial CSI
<i>Francesco Negro, Eurecom Institute; Irfan Ghauri, Infineon Technologies France; Dirk Slock, Eurecom Institute</i> | 4:20 PM |
| TP5b-4 | On the Nuclear Norm Approach for Interference Alignment
<i>Huiqin Du, Tharm Ratnarajah, Queen's University Belfast</i> | 4:45 PM |
| TP5b-5 | Interference Alignment in Coordinated Multi-Point Systems
<i>Seyed Morteza Razavi, Tharm Ratnarajah, Queen's University Belfast</i> | 5:10 PM |

Session TP6a Wireless Full Duplex

Chair: *Ashutosh Sabharwal, Rice University*

- | | | |
|--------|---|---------|
| TP6a-1 | Decode-and-Cancel for Interference Cancellation in Full-duplex Networks
<i>Jingwen Bai, Ashutosh Sabharwal, Rice University</i> | 1:30 PM |
| TP6a-2 | Full-Duplex MIMO Relaying: Achievable Rates under Limited Dynamic Range
<i>Brian Day, Ohio State University; Daniel Bliss, Adam Margetts, MIT Lincoln Laboratory; Philip Schniter, Ohio State University</i> | 1:55 PM |
| TP6a-3 | Full Duplex Wireless Communications with Partial Interference Cancellation
<i>Jianshu Zhang, Seyed Omid Taghizadeh Motlagh, Ilmenau University of Technology; Jian Luo, Fraunhofer Heinrich-Hertz-Institute; Martin Haardt, Ilmenau University of Technology</i> | 2:20 PM |
| TP6a-4 | Wideband Digital Cancellation for Full-Duplex Communications
<i>Mohammad Ali Khojastepour, Sampath Rangarajan, NEC Laboratories America, Inc.</i> | 2:45 PM |

Session TP6b Biological Image Analysis

Chair: *Scott T. Acton, University of Virginia*

- | | | |
|--------|---|---------|
| TP6b-1 | Assessment of Wallerian Degeneration by Automated Image Analysis
<i>Andrea Vaccari, Kanchana Gamage, Sapir Nachum, Barry Condon, Christopher Deppmann, Scott Acton, University of Virginia</i> | 3:30 PM |
|--------|---|---------|

TP6b-2	Robust Biological Image Sequence Analysis Using Graph Based Approaches <i>B.S. Manjunath, Diana Delibaltov, Karthikeyan Shanmuga Vadivel, Vignesh Jagadeesh, University of California, Santa Barbara</i>	3:55 PM
TP6b-3	A Linear, Transportation-based, Embedding Method for Analyzing Biomedical Images <i>G.K. Rohde, W. Wang, S. Basu, D. Slepcev, Carnegie Mellon University</i>	4:20 PM
TP6b-4	An Information Theoretic Framework for MRI Preprocessing, Multiclass Feature Selection and Segmentation of PF Tumors <i>Shaheen Ahmed, Emory U.; K.M. Iftikharuddin, Old Dominion University; E.O. George, University of Memphis</i>	4:45 PM
TP6b-5	The Effect of Image Registration on the Localization of Single Molecules in Microscopy Experiments <i>Raimund Ober, Edward Cohen, University of Texas at Dallas</i>	5:10 PM

Session TP7a MIMO Radar and Waveform Design

Chair: *Marius Pesavento, TU Darmstadt*

TP7a-1	Transmit Beam-space Design for Direction Finding in Colocated MIMO Radar with Arbitrary Receive Array and Even Number of Waveforms <i>Arash Khabbazi-basmenj, Sergiy Vorobyov, Aboulnasr Hassanien, Matthew Morency, University of Alberta</i>	1:30 PM
TP7a-2	Jammer Detection and Estimation with MIMO Radar <i>Xiufeng Song, Peter Willett, Shengli Zhou, University of Connecticut</i>	1:55 PM
TP7a-3	Non-linear Processing for Multicarrier MIMO Radar for Improved Target Resolution <i>Mir H. Mahmood, Mark R. Bell, Purdue University</i>	2:20 PM
TP7a-4	Generating Correlated QPSK Waveforms by Exploiting Real Gaussian Random Variables <i>Jardak Seifallah Jardak, Tunisia Polytechnic School (TPS)-University of Carthage; Sajid Ahmed, Slim Alouini, King Abdullah University of Science and Technology</i>	2:45 PM

Session TP7b Speech Processing and Speech Recognition (invited)

Chair: *Tokunbo Ogunfunmi, Santa Clara University*

TP7b-1	Reproducing Kernel-based Methods for Extracting and Identifying Noise-Robust Speech Features <i>Shantanu Chakrabartty, Michigan State University</i>	3:30 PM
TP7b-2	Joint Tracking of Clean Speech and Noise Using HMMS and Particle Filters for Robust Speech Recognition <i>Aleem Mushtaq, Chin-Hui Lee, Georgia Institute of Technology</i>	3:55 PM

- TP7b-3 Sparsity-Constrained Stranded Gaussian Mixture Hidden Markov Models for Automatic Speech Recognition 4:20 PM
Yong Zhao, Biing-Hwang (Fred) Juang, Georgia Institute of Technology
- TP7b-4 Visual Speech Recognition Using Stereo-Vision Image 4:45 PM
Chao Sui, Mohammed Bennamoun, Roberto Togneri, Serajul Haque, Damien Pontifex, University of Western Australia
- TP7b-5 On the Integration of Time-Frequency Masking Source Separation and Missing Data Speech Recognition in Underdetermined Environments 5:10 PM
Ingrid Jafari, Serajul Haque, Roberto Togneri, Sven Nordholm, University of Western Australia

Session TP8a1 Relay Networks

Chair: Maite Brandt-Pearce, University of Virginia

1:30 PM - 3:10 PM

- TP8a1-1 On OFDMA Resource Allocation for Delay Constrained HARQ Systems
Sébastien Marcille, Thales Communications and Security; Philippe Ciblat, Télécom ParisTech; Christophe Le Martret, Thales Communications and Security
- TP8a1-2 Cooperative AF MIMO Wireless Relay Networks under Relay Power Constraint
Kanghee Lee, Hyuck Kwon, Hyunggi Kim, Wichita State University; Hyuncheol Park, Yong Lee, Korea Advanced Institute of Science and Technogy
- TP8a1-3 Average Sum-BER Analysis of AF Two-way Relay Networks with Direct Links
Cihan Tepedelenlioglu, Hyunjun Kim, Arizona State University
- TP8a1-4 Performance Analysis of Amplify-and-Forward Relaying Using Fractional Calculus
Mehdi Mortazawi Molu, Norbert Goertz, Vienna University of Technology
- TP8a1-5 Delay-Optimal Multi-flow Buffered Decode-and-Forward Relay Communications with Limited Renewable Energy Storage
Fan Zhang, Vincent Lau, Hong Kong University of Science and Technology
- TP8a1-6 Relay Selection in Amplify-and-Forward Relay Networks with Frequency Selective Fading
Qingxiong Deng, Andrew G. Klein, Worcester Polytechnic Institute
- TP8a1-7 On SINR Balancing for a Two-Hop Downlink Channel
Jan Schreck, Slawomir Stanczak, Technische Universität Berlin

- TP8a1-8 **A Power Saving Dual-Hop Architecture Based on Hybrid Spatial Modulation**
Athanasios Stavridis, Sinan Sinanovic, University of Edinburgh; Marco Di Renzo, French National Center for Scientific Research (CNRS); Harald Haas, University of Edinburgh
- TP8a1-9 **On the Performance Loss of Distributed over Centralized Relay Beamforming**
Qiang Xiao, University of Toronto; Min Dong, University of Ontario Institute of Technology; Ben Liang, University of Toronto
- TP8a1-10 **SNR Advantage of Group Transmissions in Multihop Networks with Amplify-and-forward Relays**
Birsen Sirkeci-Mergen, San Jose State University

Session TP8a2 Sensor and Interference Networks

Chair: *Lifeng Lai, Worcester Polytechnic Institute*

1:30 PM - 3:10 PM

- TP8a2-1 **Multiple Access Game with a Cognitive Jammer**
Karim Khalil, Eylem Ekici, Ohio State University
- TP8a2-2 **Stochastic Ordering of Interferences in Large-scale Networks**
Junghoon Lee, Cihan Tepedelenlioglu, Arizona State University
- TP8a2-3 **Improving WLAN-Based Indoor Mobile Positioning Using Sparsity**
Mohammad Pourhomayoun, Mark Fowler, Binghamton University
- TP8a2-4 **Parameter Tracking via Optimal Distributed Beamforming in an Analog Sensor Network**
Feng Jiang, Jie Chen, Lee Swindlehurst, University of California, Irvine
- TP8a2-5 **On the Diversity Multiplexing Tradeoff in a 4-user Clustered Z-channel**
Myung Gil Kang, Young-bin Kim, Wan Choi, Korea Advanced Institute of Science and Technology (KAIST)
- TP8a2-6 **Distributed Cross-Layer Optimal Power and Rate Control in Single-Hop Wireless Interference Networks**
Ying Cui, Stephen Hanly, Macquarie University
- TP8a2-7 **Performance Analysis of Ad Hoc Networks with Interference Alignment**
Yi Luo, Huiqin Du, Tharm Ratnarajah, Dave Wilcox, Queen's University Belfast
- TP8a2-8 **Convergence Properties of Incremental Subgradient Algorithms for Least-Squares Source Localization**
Michael Rabbat, McGill University; Angelia Nedic, University of Illinois
- TP8a2-9 **Traffic Handling of Hybrid MAC in IEEE 802.15.4 Networks**
Jae-Seok Bang, Hyung-Sin Kim, Yong-Hwan Lee, Seoul National University

- TP8a2-10 Lifetime Maximization in Distributed Sensor Network with Event Triggered Adaptive Filtering
Amaresh Malipatil, Yih-Fang Huang, University of Notre Dame
- TP8a2-11 Joint Localization and Clock Synchronization for Wireless Sensor Networks
Sundeep Prabhakar Chepuri, Geert Leus, Alle-Jan van der Veen, Delft University of Technology

Session TP8a3 Design Methodology and Computer Arithmetic

Chair: *Milos Ercegovac, University of California, Los Angeles*

1:30 PM - 3:10 PM

- TP8a3-1 Runtime Voltage/Frequency Scaling for Energy-Aware Streaming Applications
Flavius Gruian, Lund University
- TP8a3-2 Residue Codes for Error Correction in a Combined Decimal/Binary Redundant Floating Point Adder
Shehab Y. Elsayed, Hossam A. H. Fahmy, Cairo University
- TP8a3-3 Hardware Implementation of the Hirschman Optimal Transform
Soumak Mookherjee, Linda DeBrunner, Victor DeBrunner, Florida State University
- TP8a3-4 Partitioning and Mapping Dynamic Dataflow Programs
Mehmet Ali Arslan, Jörn Janneck, Krzysztof Kuchcinski, Lund University
- TP8a3-5 Effects on Power Saving of Butterfly and Inverse Butterfly Nets Integration in Embedded Processors
Gian Carlo Cardarilli, Princeton University; Luca Di Nunzio, Rocco Fazzolari, Marco Re, Ruby B. Lee, University of Rome Tor Vergata
- TP8a3-6 Modified Non-restoring Division Algorithm with Improved Delay Profile and Error Correction
Kihwan Jun, Earl Swartzlander, Jr., University of Texas at Austin
- TP8a3-7 Analysis of Trade-offs in V2P-Table Design for NAND Flash
Borja Peleato, Rajiv Agarwal, John Cioffi, Stanford University
- TP8a3-8 Toward Efficient Execution of Dataflow Actors
Gustav Cedersjö, Jörn Janneck, Lund University

Session TP8b1 Speech, Image, and Video Processing

Chair: *Michael Santoro, University of Chile / Georgia Tech*

3:30 PM - 5:10 PM

- TP8b1-1 Improved Modeling of the Correlation Between Continuous-Valued Sources in LDPC-Based DSC
Mojtaba Vaezi, Fabrice Labeau, McGill University

- TP8b1-2 Multispectral Vegetation Detection for Improved SAR
CCD
Bea Yu, Rhonda Phillips, MIT Lincoln Laboratory
- TP8b1-3 HVS Based Dictionary Learning for Scalable Sparse
Image Representation
*Bojana Begovic, Vladimir Stankovic, Lina Stankovic,
University of Strathclyde; Samuel Cheng, School of
Electrical and Computer Engineering*
- TP8b1-4 Regional Features with Adaptable Global Mappings for
Recognition Systems
Katia Estabridis, Naval Air Weapons Center
- TP8b1-5 A Robust Super Resolution Method for Video
*Nafise Barzigar, Aminmohammad Roozgard, Samuel
Cheng, Pramode Verma, University of Oklahoma*
- TP8b1-6 An Efficient Video Denoising Method Using
Decomposition Approach for Low-Rank Matrix
Completion
*Nafise Barzigar, Aminmohammad Roozgard, Samuel
Cheng, Pramode Verma, University of Oklahoma*
- TP8b1-7 Speech Enhancement of Color Noise Using Empirical
Mode Decomposition
*Min-Sung Koh, Esteban Rodriguez-Marek, Eastern
Washington University*
- TP8b1-8 Objective Quality Assessment of Multiply Distorted
Images
*Dinesh Jayaraman, Anish Mittal, Anush Moorthy, Alan
Bovik, University of Texas at Austin*
- TP8b1-9 Temporal Dispersal of Multiple Representations for
Error-Resilient Video Streaming
*Sourabh Khire, Georgia Institute of Technology; Arturo
Rodriguez, Cisco Systems; Nikil Jayant, Georgia Institute
of Technology*
- TP8b1-10 A New Map-based Approach to Video De-interlacing
Using Forward-Backward Algorithm
Farhang Vedadi, Shahram Shirani, McMaster University
- TP8b1-11 A Novel De-interlacing Method Based on Locally-
Adaptive Nonlocal-Means
*Roozbeh Dehghannasiri, Shahram Shirani, McMaster
University*
- TP8b1-12 Regularization Function for Video Super-Resolution
Using Auxillary High Resolution Still Images
Seyedreza Najafi, Shahram Shirani, McMaster University
- TP8b1-13 Making Image Quality Assessment Robust
*Anish Mittal, Anush Moorthy, Alan Bovik, University of
Texas at Austin*
- TP8b1-14 Blur Identification Based on Spectrum Density
Distribution
Dalong Li, Simske Steve, HP
- TP8b1-15 Probabilistic Three-Pass SAR Coherent Change
Detection
Jarred Barber, Stephen Kogon, MIT Lincoln Laboratory
- TP8b1-16 A Generalized Likelihood Ratio Test for SAR CCD
*Michael Newey, Gerald Benitz, Stephen Kogon,
Massachusetts Institute of Technology Lincoln Laboratory*

- TP8b1-17 Camera Placement for Handheld 3D Video Communications
Stephen Mangiat, Jerry Gibson, University of California, Santa Barbara
- TP8b1-18 Depth-Less 3D Rendering
Mashhour Solh, Ghassan AlRegib, Georgia Institute of Technology

Session TP8b2 Biomedical Signal and Image Processing

Chair: *Keshab K. Parhi, University of Minnesota*

3:30 PM - 5:10 PM

[Paper TP8b2-1 will be presented in MP8a.]

- TP8b2-1 Ultrasonic Bone Assessment of the Distal Forearm
Jonathan Kaufman, Gangming Luo, CyberLogic, Inc.; Robert Siffert, Mount Sinai School of Medicine
- TP8b2-2 Performance Analysis of a 2-D EEG Compression Algorithm Using an Automatic Seizure Detection System
Hoda Daou, Fabrice Labeau, McGill University
- TP8b2-3 A Novel Method for Tumor Localization and Tracking in Radiation Therapy
Mohammad Pourhomayoun, Mark Fowler, Zhanpeng Jin, Binghamton University
- TP8b2-4 Screening Fundus Images for Diabetic Retinopathy
Sohini RoyChowdhury, Dara Koozakanani, Keshab K. Parhi, University of Minnesota
- TP8b2-5 EEG/MEG Artifact Suppression for Improved Neural Activity Estimation
Alexander Maurer, Lifeng Miao, Arizona State University; Jun Jason Zhang, University of Denver; Antonia Papandreou-Suppappola, Arizona State University
- TP8b2-6 Beta Process Based Adaptive Learning of Immunosignaturing Peptide-Antibody Factors
Anna Malin, Narayan Kovvali, Antonia Papandreou-Suppappola, Stephen Johnston, Phillip Stafford, Arizona State University

Session WA1a Feedback and Cooperation (invited)

Chair: *Giuseppe Abreu, Jacobs University*

- WA1a-1 Random Access on Graphs: A Survey and New Results 8:15 AM
Enrico Paolini, University of Bologna; Gianluigi Liva, German Aerospace Center (DLR); Marco Chiani, University of Bologna
- WA1a-2 Node Cooperation with Local Views 8:40 AM
David Kao, Ashutosh Sabharwal, Rice University
- WA1a-3 A Feedback Strategy for the Full-Duplex Butterfly Network 9:05 AM
Aydin Sezgin, Anas Chaaban, Ruhr-University Bochum; Daniela Tuninetti, University of Illinois, Chicago

- | | | |
|--------|---|---------|
| WA1a-4 | Characterizing the Mutual Information Distribution of MIMO Systems: Beyond the Gaussian Approximation
<i>Shang Li, Matthew McKay, Hong Kong University of Science and Technology; Yang Chen, University of Macau</i> | 9:30 AM |
|--------|---|---------|

Session WA1b Security

Chair: *A. Lee Swindlehurst, University of California, Irvine*

- | | | |
|--------|---|----------|
| WA1b-1 | Distributed Jamming for Secure Communication in a Poisson Field of Legitimate Nodes and Eavesdroppers
<i>Wei Shi, James Ritcey, University of Washington</i> | 10:15 AM |
| WA1b-2 | Deploying Multi-antenna Energy-Harvesting Cooperative Jammers in the MIMO Wiretap Channel
<i>Amitav Mukherjee, Nokia Research Center; Jing Huang, University of California, Irvine</i> | 10:40 AM |
| WA1b-3 | Unicasting on the S-Graph
<i>Satyanarany Vuppala, Giuseppe Abreu, Jacobs University Bremen</i> | 11:05 AM |
| WA1b-4 | Secrecy Capacity Limits of Multiple Antenna Multiple Eavesdropper Multicast
<i>Jafar Mohammadi, Michal Kaliszan, Slawomir Stanczak, Berlin Institute of Technology</i> | 11:30 AM |

Session WA2a Distributed Algorithms for Wireless Networks

Chair: *Lee Swindlehurst, University of California, Irvine*

- | | | |
|--------|--|---------|
| WA2a-1 | Distributed and Autonomous Resource Allocation for Femto-Cellular Networks
<i>Harald Burchardt, University of Edinburgh; Zubin Bharucha, DoCoMo Euro-Labs; Harald Haas, University of Edinburgh</i> | 8:15 AM |
| WA2a-2 | Universal Computation with Low-Complexity Wireless Relay Networks
<i>Eric Slotke, Raphael Rolny, Armin Wittneben, Swiss Federal Institute of Technology Zurich</i> | 8:40 AM |
| WA2a-3 | A Unified Analysis of CDF-based Distributed Scheduling in a Heterogeneous Multicell
<i>Yichao Huang, Bhaskar D. Rao, University of California, San Diego</i> | 9:05 AM |
| WA2a-4 | Unsupervised Algorithms for Distributed Estimation over Adaptive Networks
<i>Muhammad Bin Saeed, Azzedine Zerguine, Salam Zummo, King Fahd University of Petroleum and Minerals; Ali Sayed, University of California, Los Angeles</i> | 9:30 AM |

Session WA2b Topics in Wireless Networking

Chair: *Harald Haas, University of Edinburgh*

- | | | |
|--------|--|----------|
| WA2b-1 | Joint Design of Multi-resolution Codes and Intra/Inter-layer Network Coding
<i>Tong Wang, Muriel Medard, Lizhong Zheng, Massachusetts Institute of Technology</i> | 10:15 AM |
|--------|--|----------|

- | | | |
|--------|--|----------|
| WA2b-2 | Link Allocation, Routing, and Scheduling for Fading Hybrid FSO/RF Networks
<i>Yi Tang, Maite Brandt-Pearce, University of Virginia</i> | 10:40 AM |
| WA2b-3 | Approximating the Capacity of Wireless Multiple Unicast Networks by Discrete Superposition Model
<i>Nicolas Schrammar, Mikael Skoglund, KTH Royal Institute of Technology</i> | 11:05 AM |
| WA2b-4 | Convolutional Network Codes for Reliable Point-to-Point Wireless Communication
<i>Samantha Summerson, Rice University; Anuj Batra, Texas Instruments</i> | 11:30 AM |

Session WA3a Adaptive Signal Processing

Chair: *Cedric Richard, Univ. de Nice Sophia-Antipolis*

- | | | |
|--------|--|---------|
| WA3a-1 | Diffusion Least-Mean Squares over Distributed Networks in the Presence of MAC Errors
<i>Saeed Ghazanfari-Rad, Fabrice Labeau, McGill University</i> | 8:15 AM |
| WA3a-2 | Stochastic Adaptive Filtering Using Model Combinations
<i>Chandrasekhar Radhakrishnan, Andrew Singer, University of Illinois, Urbana-Champaign</i> | 8:40 AM |
| WA3a-3 | A Closed-Form Condition for Convergence of the Gaussian Kernel-Least-Mean-Square Algorithm
<i>Cédric Richard, Université de Nice Sophia-Antipolis; Jose Carlos M. Bermudez, Federal University of Santa Catarina, Florianópolis</i> | 9:05 AM |
| WA3a-4 | Complex Colored Water-Filling Algorithm for Gain Allocation in Proportionate Adaptive Filtering
<i>Kevin Wagner, Naval Research Laboratory; Milos Doroslovacki, George Washington University</i> | 9:30 AM |

Session WA3b Compressive Signal Processing

Chair: *Sergiy Vorobyov, University of Alberta*

- | | | |
|--------|---|----------|
| WA3b-1 | 2D Signal Compression via Parallel Compressed Sensing with Permutations
<i>Hao Fang, Sergiy A. Vorobyov, Hai Jiang, Omid Taheri, University of Alberta</i> | 10:15 AM |
| WA3b-2 | Detecting an Abrupt Change of Finite Duration
<i>Blaise Kévin Guépié, Lionel Fillatre, Igor Nikiforov, Université de Technologie de Troyes</i> | 10:40 AM |
| WA3b-3 | Adaptive Sensing: A Tight Lower Bound and the Near-Optimal Compressive Binary Search
<i>Matthew Malloy, Robert Nowak, University of Wisconsin Madison</i> | 11:05 AM |
| WA3b-4 | Rapid Sensing of Underutilized, Wideband Spectrum Using the Random Demodulator
<i>Andrew Harms, Princeton University; Waheed Bajwa, Rutgers University; Robert Calderbank, Duke University</i> | 11:30 AM |

Session WA4a Interference and Cognition

Chair: *Thomas L Marzetta, Alcatel-Lucent/Bell Labs*

- WA4a-1 Interference Alignment for Channel-Adaptive Waveform Modulation 8:15 AM
Urs Niesen, Thomas Marzetta, Bell Laboratories, Alcatel-Lucent
- WA4a-2 On the Discrete Superposition Model of Partially Cognitive Interference Channels 8:40 AM
Nicolas Schrammar, Chao Wang, Lars K. Rasmussen, Mikael Skoglund, KTH Royal Institute of Technology
- WA4a-3 Interference Management for Cognitive Radio Systems Exploiting Primary IR-HARQ: a Constrained Markov Decision Process approach 9:05 AM
Romain Tajan, University of Cergy - Pontoise; Charly Poulliat, University of Toulouse; Inbar Fijalkow, University of Cergy - Pontoise
- WA4a-4 Energy-Aware Cooperative Quickest Detection for Cognitive Radio Networks 9:30 AM
Yan Xin, Kyungtae Kim, Sampath Rangarajan, NEC Laboratories America, Inc.

Session WA4b OFDM(A)

Chair: *Michael Zoltowski, Purdue University*

- WA4b-1 Effect of Oscillator Phase Noise and Processing Delay in Full-Duplex OFDM Repeaters 10:15 AM
Taneli Riihonen, Pramod Mathecken, Risto Wichman, Aalto University
- WA4b-2 Weighted CDF-based Scheduling for an OFDMA Relay Downlink with Partial Feedback 10:40 AM
Anh Nguyen, Yichao Huang, Bhaskar Rao, University of California, San Diego
- WA4b-3 Transmitter-Side Timing Adjustment to Mitigate Interference between Multiple Nodes for OFDMA Mesh Network 11:05 AM
Sungeun Lee, Xiaoli Ma, Georgia Institute of Technology
- WA4b-4 Detection of Code Spread OFDM Based on 0-1 Integer Quadratic Programming 11:30 AM
Ali Elgharini, Purdue university

Session WA5a Applications of Video Processing

Chair: *Mashhour Solh, Texas Instruments Inc.*

- WA5a-1 Automatic Track Tracing in SAR CCD Images Using Search Cues 8:15 AM
Miriam Cha, Rhonda Phillips, MIT Lincoln Laboratory
- WA5a-2 H.264/AVC Data Hiding Based on Intra Prediction Modes for Real Time Applications 8:40 AM
Samira Bouchama, Research Center on Scientific and Technical Information; Latifa Hamami, National Polytechnic School of Algiers; Hassina Aliane, Research Center on Scientific and Technical Information

- WA5a-3 A Computer Vision System for Monitoring Vessel Motion in Conjunction with Vessel Wake Measurements 9:05 AM
Sam Tan, Jenelle Armstrong Piepmeier, David Kriebel, United States Naval Academy
- WA5a-4 Acoustic Monitoring Techniques for Avian Detection and Classification 9:30 AM
Golrokh Mirzaei, Mohammad Wadood Majid, Selin Bastas, University of Toledo; Jeremy Ross, Bowling Green State University; Mohsin Jamali, University of Toledo; Peter Gorveski, Joseph Frizado, Verner Bingman, Bowling Green State University

Session WA5b Image and Video Classification

Chair: *Dihong Tian, Cisco Systems, Inc.*

- WA5b-1 A Joint Sparsity Model for Video Anomaly Detection 10:15 AM
Xuan Mo, Vishal Monga, Pennsylvania State University; Raja Bala, Zhigang Fan, Xerox Research Center Webster
- WA5b-2 Learning Dictionaries with Graph Embedding Constraints for Image Classification 10:40 AM
Karthikeyan Natesan Ramamurthy, Jayaraman J. Thiagarajan, Andreas Spanias, Arizona State University
- WA5b-3 Training Image Classifiers with Similarity Metrics, Linear Programming, and Minimal Supervision 11:05 AM
Karl Ni, Ethan Phelps, MIT Lincoln Laboratory; Katherine Bouman, Massachusetts Institute of Technology; Nadya Bliss, MIT Lincoln Laboratory
- WA5b-4 Randomized Tensor-based Algorithm for Image Classification 11:30 AM
Ryan Sigurdson, University of Rochester; Carmeliza Navasca, University of Alabama at Birmingham

Session WA6a CSI Feedback

Chair: *Robert Heath, University of Texas at Austin*

- WA6a-1 Feedback Bit Allocation in a Gateway Channel 8:15 AM
Sung Lock Seo, Jung Hoon Lee, Wan Choi, Korea Advanced Institute of Science and Technology (KAIST)
- WA6a-2 Tomlinson-Harashima Precoding for Multiuser MIMO Systems with Quantized CSI Feedback 8:40 AM
Liang Sun, Ming Lei, NEC Labs China
- WA6a-3 Sum Rate Analysis and Quantizer Design for a Quantized Heterogeneous Feedback MIMO OFDMA Downlink 9:05 AM
Yichao Huang, Bhaskar D. Rao, University of California, San Diego
- WA6a-4 CSI Feedback Delay and Degrees of Freedom Gain Trade-Off for the MISO Interference Channel 9:30 AM
Namyoon Lee, Robert Heath, University of Texas at Austin

Session WA6b Beamforming and Relaying (invited)

Chair: *Shahram Shahbazpanahi, University of Ontario Institute of Technology*

- WA6b-1 SINR Constrained Beamforming for a MIMO Multi-user Downlink System 10:15 AM
Qingjiang Shi, Alcatel-Lucent Shanghai Bell Company; Meisam Razaviyayn, Mingyi Hong, Zhi-Quan Luo, University of Minnesota
- WA6b-2 Pragmatic Multi-cell MIMO Beamforming with Decentralized Coordination 10:40 AM
Harri Pennanen, Antti Tölli, Matti Latva-aho, University of Oulu
- WA6b-3 A Total Power Minimization Approach to Relay Selection for Two-Way Relay Networks 11:05 AM
Saurabh Talwar, Shahram ShahbazPanahi, University of Ontario Institute of Technology
- WA6b-4 Joint Network-Channel-Coded Multi-Way Relaying 11:30 AM
Andreas Winkelbauer, Gerald Matz, Vienna University of Technology

Session WA7a Applications of Sensor Array Processing

Chair: *Martin Haardt, TU Ilmenau*

- WA7a-1 Maximum Likelihood Source Localization in a Pipe using Guided Acoustic Waves 8:15 AM
Nicholas O'Donoughue, Joel Harley, Chang Liu, Jose' M.F. Moura, Irving Oppenheim, Carnegie Mellon University
- WA7a-2 Field Testing of Indirect Displacement Estimation Using Accelerometers 8:40 AM
Viswanadh Kandula, Linda DeBrunner, Victor DeBrunner, Michelle Rambo-Roddenberry, Florida State University
- WA7a-3 Wireless Sensor Network Discovery Using Large Aperture Array Signal Processing 9:05 AM
Marc Willerton, Imperial College London; Mahesh Banavar, Xue Zhang, Arizona State University; Athanassios Manikas, Imperial College London; Andreas Spanias, Trevor Thornton, Arizona State University; Anthony Constantinides, Eric Yeatman, Imperial College London
- WA7a-4 Clipping Effect on Radiation Pattern in Downtilt Beamforming 9:30 AM
Qingsong Wen, Sungeun Lee, Xiaoli Ma, Georgia Institute of Technology

Session WA7b DOA Estimation

Chair: *Alexandre Renaux, Université d'Orsay*

- WA7b-1 A Robust L-1 Penalized DOA Estimator 10:15 AM
Ashkan Panahi, Mats Viberg, Chalmers University of Technology

- WA7b-2 Adaptive Direction Detection of Extended 10:40 AM
Targets in Noise Plus Unknown Subspace
Interference
Francesco Bandiera, University of Salento; Olivier Besson, ISAE (Institut Supérieur de l'Aéronautique et de l'Espace); Giuseppe Ricci, University of Salento
- WA7b-3 A Semi-algebraic Framework for 11:05 AM
Approximate CP Decompositions via Joint Matrix
Diagonalization and Generalized Unfoldings
Florian Roemer, Carola Schroeter, Martin Haardt, Ilmenau University of Technology
- WA7b-4 Direction of Arrival Estimation of Correlated 11:30 AM
Signals Using a Dynamic Non-uniform Linear
Array
Dyonisius Dony Ariananda, Geert Leus, Delft University of Technology

Author List

NAME	SESSION	NAME	SESSION
Aabed, Mohammed	TA5a-3	Bandiera, Francesco	TA8a1-6
Aazhang, Behnaam	TP2a-1	Bandiera, Francesco	WA7b-2
Abdel Khalek, Amin	TA1b-3	Bang, Jae-Seok	TP8a2-9
Abdel-Ghaffar, Khaled	TA2b-2	Baraniuk, Richard	MP1a-1
Abramovich, Yuri I.	MA2b-1	Baras, John	TA4b-4
Abreu, Giuseppe	MA8b2-9	Barber, Jarred	TP8b1-15
Abreu, Giuseppe	WA1b-3	Barkowsky, Marcus	TA5a-4
Acton, Scott	MP7b-4	Barrenechea, Maitane	MP8a1-1
Acton, Scott	TP6b-1	Bar-Shalom, Yaakov	TA8a1-9
Agarwal, Rajiv	TP8a3-7	Barzigar, Nafise	TP8b1-5
Ahmad, Aitzaz	TA8a2-13	Barzigar, Nafise	TP8b1-6
Ahmed, Ali	TA3b-3	Basar, Tamer	TA3b-4
Ahmed, Sajid	TP7a-4	Basar, Tamer	TA4a-4
Ahmed, Shaheen	TP6b-4	Bastas, Selin	WA5a-4
Akoum, Salam	TA3a-2	Bastug, Ejder	MA4b-4
Albicocco, Pietro	TA5b-1	Basu, S.	TP6b-3
Albicocco, Pietro	TA6b-4	Batra, Anuj	WA2b-4
Albicocco, Pietro	TA8b3-6	Bauso, Dario	TA4a-4
Alcocer-Sosa, M.	MP7b-3	Bayram, Safak	TP4b-5
Alevizos, Panos	TA8a1-15	Bean, Andrew	MP1b-4
Aliane, Hassina	WA5a-2	Bean, Andrew	TP2b-2
Alouini, Mohamed-Slim	MP4a-2	Beg, M. Salim	TA8b3-5
Alouini, Slim	TP7a-4	Begovic, Bojana	TP8b1-3
Alpcan, Tansu	TA2a-2	Bekrani, Mehdi	TA8a2-7
AlRegib, Ghassan	TA5a-3	Belardinelli, Paolo	MA7b-2
AlRegib, Ghassan	TP8b1-18	Bell, Mark R.	TP7a-3
Amar, Alon	MA8b2-2	Bengtsson, Mats	MP8a1-11
Amiri, Behzad	TP4a-4	Benitz, Gerald	TP8b1-16
Andrews, Jeff	TA3a-1	Bennamoun, Mohammed	TP7b-4
Angelopoulos, Georgios	TP3a-2	Bento, Jose	MA1b-4
Antonelli, Cristian	TA1a-2	Bermudez, Jose Carlos M.	WA3a-3
Antoniou, Zinon	MP5a-4	Besson, Olivier	WA7b-2
Ariananda, Dyonisius Dony	MP4a-1	Bharucha, Zubin	WA2a-1
Ariananda, Dyonisius Dony	WA7b-4	Bhattacharya, Sourabh	TA3b-4
Armstrong Piepmeier, Jenelle	WA5a-3	Bialkowski, Konstanty	MA8b2-1
Arnau, Jesús	MP8a1-4	Bianchi, Pascal	TP1b-1
Arslan, Mehmet Ali	TP8a3-4	Bidigare, Pat	MA8b2-8
Ashikhmin, Alexei	MP3a-4	Bin Saeed, Muhammad	WA2a-4
Atkinson, Gary	TP4b-3	Bing, Kristin	MP7b-2
Austin, Christian	MA1b-1	Bingman, Verner	WA5a-4
Aval, Yashar M.	TP3b-1	Blaauw, David	TA6a-3
Ayad, Mustafa	MP8a2-8	Bletsas, Aggelos	TA8a1-15
Azarian, Sylvain	MA4b-4	Bliss, Daniel	MA3b-2
Baggeroer, Arthur	MA8b2-4	Bliss, Daniel	TP6a-2
Bai, Dongwoon	MA8b1-7	Bliss, Nadya	WA5b-3
Bai, Jingwen	TP6a-1	Bolstad, Andrew	TA8b3-4
Bajwa, Waheed	WA3b-4	Bordonaro, Steven	TA8a1-9
Bajwa, Waheed U.	TP2a-1	Bouchama, Samira	WA5a-2
Bala, Raja	WA5b-1	Bouman, Charles	MP5b-4
Banavar, Mahesh	TP2a-2	Bouman, Katherine	WA5b-3
Banavar, Mahesh	WA7a-3	Bovik, Al	MP5a-3

NAME	SESSION	NAME	SESSION
Bovik, Alan.....	TA5a-1	Chen, Jie	TP3a-1
Bovik, Alan.....	TP8b1-8	Chen, Jie	TP8a2-4
Bovik, Alan.....	TP8b1-13	Chen, Kwang-Cheng	MP4b-4
Boyer, Remy.....	MA2b-3	Chen, Lijun	TP4b-1
Brandt-Pearce, Maite.....	MA8b1-16	Chen, Ming-Jun	TA5a-1
Brandt-Pearce, Maite.....	WA2b-2	Chen, Weidong.....	TA8a1-3
Brewer, Jerry	TA8b1-7	Chen, Weidong.....	TA8a1-12
Brossier, Jean-Marc.....	TA8b1-9	Chen, Xiaofei	MA8b1-15
Brown, Jarrod	TA8b3-7	Chen, Yang.....	WA1a-4
Brown, Rick	MA8b2-8	Chen, Yejian	TA8b2-6
Brown, Robert.....	TA7b-3	Cheng, Qi	TA8b1-5
Browne, David	TA8b1-10	Cheng, Samuel.....	TP8b1-3
Bruck, Jehoshua.....	TA2b-1	Cheng, Samuel.....	TP8b1-5
Buchner, Herbert	MA8b2-3	Cheng, Samuel.....	TP8b1-6
Buck, John.....	TA8a1-8	Cheपुरi, Sundeep Prabhakar	TP8a2-11
Bugallo, Monica F.....	MP8a2-2	Chiani, Marco	WA1a-1
Burchardt, Harald	WA2a-1	Choi, Wan	TP8a2-5
Burg, Andreas.....	MP8a1-1	Choi, Wan	WA6a-1
Burgess, Neil	MP6a-4	Chong, Edwin	TP3a-3
Bursalioglu, Ozgun Y.	TA3a-4	Chou, Tina	TA8b1-7
Butabayeva, Arailym.....	TA8b2-5	Ciblat, Philippe.....	MA8b1-5
Butler, Brian K.....	TA2b-4	Ciblat, Philippe.....	TP8a1-1
Cabric, Danijela	TA8b1-1	Cioffi, John.....	TP8a3-7
Caire, Giuseppe.....	TP1a-1	Clarkson, I. Vaughan	MA8b2-1
Cakiades, George.....	MA8b2-16	Cochran, Douglas.....	MP8a2-13
Calderbank, Robert	TP2a-1	Codreanu, Marian.....	MP8a1-8
Calderbank, Robert	WA3b-4	Codreanu, Marian.....	TA8a2-9
Caramanis, Constantine	TA1b-3	Cohen, Edward.....	TP6b-5
Cardarilli, Gian Carlo	TA5b-1	Condron, Barry	TP6b-1
Cardarilli, Gian Carlo	TA6b-4	Constantinides, Anthony.....	WA7a-3
Cardarilli, Gian Carlo	TA8b3-6	Cormack, Lawrence K.	TA5a-1
Cardarilli, Gian Carlo	TP8a3-5	Cosman, Pamela C.	TA1b-2
Caromi, Raied.....	MP4a-3	Cousins, Dave	MA8b2-8
Casari, Paolo	TP3b-4	Cui, Ying.....	TP8a2-6
Catipovic, Josko	TP3b-3	Dallinger, Robert.....	TA8a2-3
Cavallaro, Joseph R.	TA8b3-2	Daniels, Michelle	MA5b-4
Cavallaro, Joseph R.	TA8b3-3	Daou, Hoda	TP8b2-2
Cavallaro, Joseph R.	TP5a-4	Dasarathan, Sivaraman.....	TP2a-2
Cedersjö, Gustav.....	TP8a3-8	Davenport, Mark.....	MP1a-3
Cenk Yetis, Mustafa.....	MP2b-4	Day, Brian	TP6a-2
Cevher, Volkan	MA1b-3	de Lamare, Rodrigo.....	TP4a-3
Cha, Miriam	WA5a-1	de Lamare, Rodrigo C.	MP8a1-3
Chaaban, Anas.....	WA1a-3	De Lathauwer, Lieven.....	TA8a1-11
Chakrabartty, Shantanu.....	TP7b-1	Debbah, Mérouane.....	MA4b-4
Chamon, Luiz	MP8a2-9	Debbah, Mérouane.....	MP3a-2
Chandler, Damon.....	MP5a-2	DeBrunner, Linda.....	TA8b3-7
Chandrachoodan, Nitin.....	TP5a-3	DeBrunner, Linda.....	TP8a3-3
Chang, Chih-Hua.....	MP4b-1	DeBrunner, Linda.....	WA7a-2
Chang, Dan	MA8b2-8	DeBrunner, Victor	MP8a2-14
Chang, Jeannette	TA8b1-7	DeBrunner, Victor	TA8a2-12
Chang, Nicholas	MP8a1-2	DeBrunner, Victor	TP8a3-3
Chang, Nicholas	TP5a-2	DeBrunner, Victor	WA7a-2
Chen, Chen	MP5b-2	Dehghannasiri, Roozbeh	TP8b1-11
Chen, Hung-Wei.....	MP8a2-1	Delibaltov, Diana.....	TP6b-2

NAME	SESSION	NAME	SESSION
Demirtas, Sefa.....	MP8a2-6	Fan, Zhigang	WA5b-1
Deng, Mo	TA7b-1	Fang, Hao.....	WA3b-1
Deng, Qingxiong.....	TP8a1-6	Fang, Jun.....	TP1b-5
Denloye-Ito, Emmanuel.....	MP7b-4	Fannjiang, Albert.....	MP8a2-10
Deppmann, Christopher	TP6b-1	Fasarakis-Hilliard, Nikos.....	TA8a1-15
Deriche, Rachid.....	MP7a-2	Fazzolari, Rocco.....	TP8a3-5
Desai, Sachi	MA8b2-16	Feizi, Soheil.....	TP3a-2
Devetsikiotis, Michael.....	TP4b-5	Feng, Bo-Kai.....	TA8a1-13
Dhillon, Harpreet S.	TA3a-1	Ferguson, Chris.....	TA6b-3
Di Nunzio, Luca	TP8a3-5	Ferrari, Andre.....	MP8a2-16
Di Renzo, Marco.....	TP8a1-8	Ferro, Humberto	MP8a2-9
Diao, Qiuju.....	TA2b-2	Fertig, Lou	TA8a1-5
Dick, Chris	MA8b1-15	Figuera, Carlos.....	MA8b1-8
Dimakis, Alexandros.....	TA1b-4	Fijalkow, Inbar.....	WA4a-3
Ding, Li	TA8a1-12	Fillatre, Lionel	WA3b-2
Dini, Dahir.....	TP2b-5	Firouzi, Hamed	TA7b-3
Djuric, Petar M.....	MP8a2-16	Foerster, Jeff.....	TA1b-1
Djuric, Petar M.....	MP8a2-2	Fort, Gersende	TP1b-1
Dolecek, Lara	TP4a-2	Fowler, James	MP5b-2
Dolecek, Lara	TP4a-4	Fowler, Mark.....	TA8a1-16
Dong, Min	TP8a1-9	Fowler, Mark.....	TP8a2-3
Dormiani, Pouya.....	TA5b-2	Fowler, Mark.....	TP8b2-3
Doroslovacki, Milos.....	WA3a-4	Friedman, Eby	TA6a-4
Du, Huiqin.....	TP5b-4	Frizado, Joseph.....	WA5a-4
Du, Huiqin.....	TP8a2-7	Gabrys, Ryan.....	TP4a-2
du Plessis, Adre.....	MA7b-3	Gamage, Kanchana.....	TP6b-1
Duan, Dongliang.....	TA8b1-6	Gan, Lingwen	TP4b-1
Dufour, Alexandre.....	MP7b-1	Gansterer, Wilfried.....	TP2a-3
Edfors, Ove.....	MP3a-3	Gao, Wenzhong.....	MP8a2-5
Eker, Johan.....	TA8b3-8	Gao, Xiang.....	MP3a-3
Ekici, Eylem.....	TP8a2-1	Garani Srinivasa, Shayan.....	TP4a-4
Eksin, Ceyhun	MP1b-2	Garcia-Vega, Carlos	MP6a-2
El Ayach, Omar.....	TA3a-2	Ge, Hongya	MA8b2-12
El Korso, Mohammed Nabil.....	MA2b-4	George, E.O.	TP6b-4
Elbatt, Tamer	TA8b1-2	George, Geordie.....	TP5b-1
Eldar, Yonina C.....	MP8a2-15	Gerig, Guido	MP7a-1
Elgharini, Ali.....	WA4b-4	Gerslauer, Andreas.....	MA6b-2
El-Keyi, Amr.....	TA8b1-11	Gerstoft, Peter	MP2a-2
Elliott, Robert.....	TA8b2-7	Gerstoft, Peter	MP2a-3
Elsayed, Shehab Y.	TP8a3-2	Gesbert, David.....	TP5b-2
Eltawil, Ahmed M.	MP6b-4	Gettings, Karen.....	TA8b3-4
Emad, Amin	TA7b-1	Ghauri, Irfan.....	TP5b-3
Ercegovac, Milos	TA5b-2	Ghazanfari-Rad, Saeed.....	WA3a-1
Ercegovac, Milos D.....	MP6a-1	Gholamipour, AmirHossein	MP6b-4
Ericson, Mike	TA8b3-4	Ghuman, Kirandeep	TA8a2-12
Ertin, Emre.....	MA8b2-13	Gibson, Jerry	MA5b-2
Eryilmaz, Atilla	TP1a-4	Gibson, Jerry	MA5b-3
Eskin, Eleazar.....	TA7b-4	Gibson, Jerry	TP8b1-17
Estabridis, Katia.....	TP8b1-4	Goertz, Norbert.....	TP8a1-4
Etzlinger, Bernhard	MA8b1-9	Gogineni, Sandeep.....	TA8b1-12
Eweda, Eweda.....	TA8a2-1	Golrezaei, Negin.....	TA1b-4
Fahmy, Hossam A. H.....	TP8a3-2	Gonzalez-Navarro, Sonia	MP6a-2
Faiz, Mohammed.....	TA8a2-10	Görtz, Norbert.....	MP2a-2
Fakoorian, Ali.....	MP8a2-12	Gorveski, Peter.....	WA5a-4

NAME	SESSION	NAME	SESSION
Govindan, Rathinaswamy.....	MA7b-3	Herrmann, Stephan.....	TA8b2-8
Grasing, David.....	MA8b2-7	Himed, Braham.....	TA8a1-2
Grasing, David.....	MA8b2-16	Hlawatsch, Franz.....	TP2a-4
Green, Merlin.....	TA8b3-4	Hlinka, Ondrej.....	TP2a-4
Gruian, Flavius.....	TP5a-1	Ho, Keang-Po.....	TA1a-3
Gruian, Flavius.....	TP8a3-1	Hofbauer, Christian.....	MA8b1-11
Gründinger, Andreas.....	TA8b2-5	Hong, Mingyi.....	MP3b-4
Guan, Kyle.....	TA1a-1	Hong, Mingyi.....	WA6b-1
Guan, Yong Liang.....	MP2b-4	Hormozdiari, Farhad.....	TA7b-4
Guépié, Blaise Kévin.....	WA3b-2	Horowitz, Larry L.....	MA2b-2
Guillen, Nancy.....	MP7b-1	Hoydis, Jakob.....	MP3a-2
Gunawan, Erry.....	MP2b-4	Hsieh, Hung-Yun.....	MP4b-1
Gunther, Jacob.....	MA8b2-10	Hsieh, Sung-Hsien.....	MP8a2-1
Gunther, Jacob.....	MP8a2-3	Huang, Hsu-Chang.....	MP8a2-7
Gunther, Jacob.....	MP8a2-4	Huang, Jing.....	WA1b-2
Gursoy, Mustafa Cenk.....	MA4b-3	Huang, Yichao.....	WA2a-3
Gutiérrez, D.....	MP7b-3	Huang, Yichao.....	WA4b-2
Gutiérrez, D.....	TA8a1-4	Huang, Yichao.....	WA6a-3
Haardt, Martin.....	MP2b-2	Huang, Yih-Fang.....	TP8a2-10
Haardt, Martin.....	MP8a1-3	Huber, Johannes B.....	MA8b1-4
Haardt, Martin.....	TP6a-3	Huemer, Mario.....	MA8b1-4
Haardt, Martin.....	WA7b-3	Huemer, Mario.....	MA8b1-10
Haas, Harald.....	TP8a1-8	Huemer, Mario.....	MA8b1-11
Haas, Harald.....	WA2a-1	Hugel, Max.....	MP1a-4
Hack, Daniel.....	TA8a1-2	Hughes, Clay.....	TA8b3-7
Hague, David.....	TA8a1-8	Hwang, Suk-seung.....	TA8a2-5
Haimovich, Alexander M.....	MP8a2-15	Ibrahimi, Morteza.....	MA1b-4
Halvorsen, Matthew.....	TA7b-2	Iftekharuddin, K.M.....	TP6b-4
Hamami, Latifa.....	WA5a-2	Ihler, Alexander.....	MA1b-2
Han, Zhu.....	TA2a-4	J. Thiagarajan, Jayaraman.....	WA5b-2
Hancock, Timothy.....	MA3b-2	Jafari, Ingrid.....	TP7b-5
Haneda, Eri.....	MP5b-4	Jagadeesh, Vignesh.....	TP6b-2
Hanly, Stephen.....	TA8b2-11	Jakovetic, Dusan.....	TP2b-4
Hanly, Stephen.....	TP8a2-6	Jakubiec, Felicia.....	TP1b-2
Haque, Serajul.....	TP7b-5	Jakubowicz, Jérémie.....	TP1b-1
Haque, Serajul.....	TP7b-4	Jamali, Mohsin.....	WA5a-4
Harley, Joel.....	WA7a-1	Jamali, Mohsin M.....	TA8b3-5
Harms, Andrew.....	WA3b-4	Janneck, Jörn.....	TA8b3-8
Harris, David.....	TA6b-3	Janneck, Jörn.....	TP8a3-4
harris, fredric.....	MA8b1-15	Janneck, Jörn.....	TP8a3-8
Haselmayr, Werner.....	MA8b1-9	Jayant, Nikil.....	TA5a-2
Hassanien, Aboulnasr.....	TP7a-1	Jayant, Nikil.....	TP8b1-9
Hayat, Majeed.....	MA8b2-6	Jayaraman, Dinesh.....	TP8b1-8
Haymaker, Kathryn.....	TA2b-3	Jenkins, William.....	TA8a2-14
He, Ting.....	MP4b-4	Jenn, David.....	TA8a1-13
Heath, Robert.....	MA6b-2	Jiang, Anxiao.....	TA2b-1
Heath, Robert.....	WA6a-4	Jiang, Feng.....	TP3a-1
Heath, Robert W.....	TA3a-2	Jiang, Feng.....	TP8a2-4
Heath, Jr., Robert W.....	TA1b-3	Jiang, Hai.....	WA3b-1
Hegde, Rajesh.....	TA8a1-10	Jiang, Huaiguang.....	MP8a2-5
Hellings, Christoph.....	TA8b2-8	Jiang, Yuebing.....	MP5a-1
Helwani, Karim.....	MA8b2-3	Jin, Pengchong.....	MP5b-4
Hero, Al.....	TA4a-1	Jin, Zhanpeng.....	TP8b2-3
Hero, Alfred.....	TA7b-3	Jing, Yindi.....	MP2b-3

NAME	SESSION	NAME	SESSION
Joham, Michael	TA8b2-5	Ko, Bongjiun	MP4b-4
Johnson, Ben A.	MA2b-1	Kobayashi, Mari	TP5b-2
Johnston, Stephen	TP8b2-6	Kogon, Stephen	TP8b1-15
Joshi, Satya	MP8a1-8	Kogon, Stephen	TP8b1-16
Juang, Biing-Hwang (Fred)	TP7b-3	Koh, Min-Sung	TP8b1-7
Jun, Kihwan	TP8a3-6	Koivunen, Visa	MP4a-4
Jung, Bang Chul	TA8b2-2	Koksal, C. Emre	TP1a-4
Juntti, Markku	TA8a2-9	Koozakanani, Dara	TP8b2-4
Juntti, Markku	TA8b3-1	Korbel, Max	TA6b-3
Juntti, Markku	TA8b3-2	Kose, Selcuk	TA6a-4
Kadloor, Sachin	TA4b-3	Kountouris, Marios	TA3a-1
Kahn, Joseph	TA1a-3	Kovvali, Narayan	TP8b2-6
Kairouz, Peter	MA6b-4	Kriebel, David	WA5a-3
Kakadiaris, Ioannis	MP7a-3	Krummenauer, Rafael	TA8a1-14
Kaliszan, Michal	WA1b-4	Krzymien, Witold	TA8b2-7
Kamath, Chandrika	TA8a2-2	Kuchcinski, Krzysztof	TP8a3-4
Kandula, Viswanadh	WA7a-2	Kuhn, Marc	TA8b2-1
Kang, Inyup	MA8b1-7	Kurdahi, Fadi J.	MP6b-4
Kang, Myung Gil	TP8a2-5	Kurras, Martin	TA8b2-12
Kao, David	WA1a-2	Kvam, Jacques	TA8b1-7
Kar, Soumya	TP1b-4	Kwan Ng, Derrick Wing	MP3a-1
Kar, Soumya	TP4b-2	Kwon, Do-Kyoung	TA5a-1
Karjalainen, Juha	MP8a1-5	Kwon, Hyuck	TP8a1-2
Kaufman, Jonathan	TP8b2-1	Kyrrilidis, Anastasios	MA1b-3
Kayser, Scott	TA2b-4	L. Zapata, Emilio	MP6a-2
Keilholz, Shella	TA7a-1	Labeau, Fabrice	TP8b1-1
Kelkar, Aditya	TA8b1-5	Labeau, Fabrice	TP8b2-2
Kelley, Christine	TA2b-3	Labeau, Fabrice	WA3a-1
Kelly, Colm	MP6b-1	Laederach, Alain	TA7b-2
Ketonen, Johanna	TA8b3-1	Lai, Lifeng	MP4a-3
Ketonen, Johanna	TA8b3-2	Lantermann, Aaron D.	MP8a2-11
Khabbazibasmenj, Arash	TP7a-1	Lasaulce, Samson	TA2a-3
Khairy, Muhammad S.	MP6b-4	Latva-aho, Matti	MP8a1-8
Khalaj, Babak	MP2b-1	Latva-aho, Matti	WA6b-2
Khalil, Karim	TP8a2-1	Lau, Vincent	MP3b-2
Khan, Farooq	TA3a-3	Lau, Vincent	TP8a1-5
Khire, Sourabh	TP8b1-9	Lazzarin, Matteo	TP3b-4
Khojastepour, Mohammad Ali	TP6a-4	Le Callet, Patrick	TA5a-4
Kifer, Daniel	TA4b-2	Le Martret, Christophe	MA8b1-5
Kim, Hanju	MA8b1-7	Le Martret, Christophe	TP8a1-1
Kim, Helen	TA8b3-4	Lebreton, Pierre	TA5a-4
Kim, Hyunggi	TP8a1-2	Lecomte, Timothee	MP7b-1
Kim, Hyung-Sin	TP8a2-9	Lee, Chin-Hui	TP7b-2
Kim, Hyunjun	TP8a1-3	Lee, Jung Hoon	WA6a-1
Kim, Joohwan	TP1a-3	Lee, Junghoon	MP7a-4
Kim, Kyungtae	WA4a-4	Lee, Junghoon	TP8a2-2
Kim, Sungsoo	MA8b1-7	Lee, Junghsi	MP8a2-7
Kim, Young Jin	TP4b-3	Lee, Jungwon	MA8b1-7
Kim, Young-bin	TP8a2-5	Lee, Kanghee	TP8a1-2
Kirsteins, Ivars	MA8b2-12	Lee, Kang-won	MP4b-4
Kiyavash, Negar	TA4b-3	Lee, Namyoon	WA6a-4
Klein, Andrew G.	TP8a1-6	Lee, Ruby B.	TP8a3-5
Knight, Chad	MA8b2-10	Lee, Sungeun	WA4b-3
Knoop, Benjamin	TP4a-1	Lee, Sungeun	WA7a-4

NAME	SESSION	NAME	SESSION
Lee, Yong.....	TP8a1-2	Ma, Xiaoli.....	WA4b-3
Lee, Yong-Hwan.....	TP8a2-9	Ma, Xiaoli.....	WA7a-4
Lee, Yoonmyung.....	TA6a-3	Macagnano, Davide.....	MA8b2-9
Lei, Ming.....	WA6a-2	Madhow, Upamanyu.....	TA3b-1
Leinonen, Markus.....	TA8a2-9	Mahmood, Mir H.....	TP7a-3
Leus, Geert.....	MP4a-1	Mahmood, Nurul Huda.....	MP4a-2
Leus, Geert.....	TP8a2-11	Mähönen, Petri.....	MP4b-2
Leus, Geert.....	WA7b-4	Mahoney, Michael.....	TA4a-2
Levis, Phil.....	MA3b-3	Mahoor, Mohammad.....	MP8a2-8
Li, Dalong.....	TP8b1-14	Maleki, Arian.....	MP1a-1
Li, Francis.....	MP6b-2	Malin, Anna.....	TP8b2-6
Li, Hongbin.....	TP1b-5	Malipatil, Amaresh.....	TP8a2-10
Li, Lin.....	MP1b-1	Malloy, Matthew.....	WA3b-3
Li, Na.....	TP4b-1	Mancino, Michele.....	TA8a1-6
Li, Peng.....	TP4a-3	Mandic, Danilo.....	TP2b-5
Li, Shang.....	WA1a-4	Mane, Pravin.....	TA5a-2
Li, Shuo.....	MA8b2-14	Mangiat, Stephen.....	TP8b1-17
Li, Shuo.....	MA8b2-15	Manikas, Athanassios.....	WA7a-3
Li, Simon.....	TP2b-3	Manjunath, B.S.....	TP6b-2
Li, Ying-Yi.....	MA5b-2	Manohar, Rajit.....	TA6b-1
Li, Yue.....	TA2b-1	Marcille, Sébastien.....	MA8b1-5
Liang, Ben.....	TP8a1-9	Marcille, Sébastien.....	TP8a1-1
Liao, Wenjing.....	MP8a2-10	Marcos, Sylvie.....	MA2b-3
Liebelt, Michael.....	MP6b-2	Margetts, Adam.....	TP6a-2
Lin, Bing-Rong.....	TA4b-2	Markovic, Dejan.....	MA6b-3
Lin, Shu.....	TA2b-2	Marple, S. Lawrence.....	MP8a2-17
Lin, Tao.....	TA2a-2	Marques, Antonio G.....	MA8b1-8
Lin, Yonghua.....	MP4b-4	Martin, Joshua S.....	TA7b-2
Liron, Guy.....	MA8b2-2	Marzetta, Thomas.....	WA4a-1
Liu, Chang.....	WA7a-1	Marzetta, Thomas L.....	MP3a-4
Liu, Changchang.....	TA8a1-3	Masazade, Engin.....	TA8b1-12
Liu, Changchang.....	TA8a1-12	Massey, Jackson.....	MA6b-2
Liu, Chih-Hao.....	MP8a1-9	Mathecken, Pramod.....	MA8b1-12
Liu, Entao.....	TP3a-3	Mathecken, Pramod.....	WA4b-1
Liu, Guifeng.....	MP8a2-14	Matsumoto, Tad.....	MP8a1-5
Liu, Jingjing.....	TP4a-3	Matz, Gerald.....	MP2a-2
Liu, Qiang.....	MA1b-2	Matz, Gerald.....	WA6b-4
Liu, Weiqiang.....	TA6a-2	Maurer, Alexander.....	TP8b2-5
Liva, Gianluigi.....	WA1a-1	Mavrychev, Evgeny.....	TA8a1-7
Lopes, Amauri.....	TA8a1-14	Mawlawi, Baher.....	MA4b-4
Lopes, Cássio.....	MP8a2-9	Mazumdar, Kaushik.....	TA6a-1
Low, Steven.....	TP4b-1	McEachen, John.....	MP8a1-10
Lozano, Angel.....	TP5b-1	McIlhenny, Robert.....	MP6a-1
Lu, Chun-Shien.....	MP8a2-1	McKay, Matthew.....	WA1a-4
Lu, Songtao.....	MA8b2-11	McPherson, R. Keith.....	MA8b1-14
Luo, Gangming.....	TP8b2-1	Mecklenbräuker, Christoph.....	MP2a-3
Luo, Jian.....	TP6a-3	Mecozzi, Antonio.....	TA1a-2
Luo, Wuqiong.....	TP1b-3	Medard, Muriel.....	TP3a-2
Luo, Yi.....	TP8a2-7	Medard, Muriel.....	WA2b-1
Luo, Zhi-Quan.....	MP3b-4	Medda, Alessio.....	TA7a-1
Luo, Zhi-Quan.....	WA6b-1	Mendicute, Mikel.....	MP8a1-1
Lutz, David.....	MP6a-4	Mériaux, François.....	TA2a-3
Ma, Wing-Kin.....	MP3b-1	Meyer, Florian.....	TP2a-4
Ma, Xiaoli.....	TA8a1-1	Miao, Lifeng.....	TP8b2-5

NAME	SESSION	NAME	SESSION
Michailidis, George	TP4b-5	Nathwani, Karan	TA8a1-10
Milenkovic, Olgica	TA7b-1	Navasca, Carmeliza	WA5b-4
Miller, Benjamin A.	TA8b3-4	Nayyar, Ashutosh	TA3b-4
Milstein, Laurence B.	TA1b-2	Ndoeye, Mandoye	TA8a2-2
Min, Jae Hong	TA5b-4	Nedic, Angelia	TP8a2-8
Mirza, Usman Mazhar	TP5a-1	Nedich, Angelia	TP1a-2
Mirzaei, Golrokh	WA5a-4	Nedich, Angelia	TP2b-2
Mitra, Urbashi	TP3b-2	Needell, Deanna	MP1a-3
Mittal, Anish	TP8b1-8	Neely, Michael	TP1a-1
Mittal, Anish	TP8b1-13	Negro, Francesco	TP5b-3
Mo, Xuan	WA5b-1	Nerguizian, Chahé	MA4b-4
Mo, Yilin	TA4b-1	Netoff, Theoden	TA7a-4
Mohammadi, Jafar	WA1b-4	Newey, Michael	TP8b1-16
Mohan, Chilukuri	TA8b1-12	Ng, Brian	MP6b-2
Mohan, Seshadri	MP4a-3	Nguyen, Anh	WA4b-2
Molavi, Pooya	MP1b-2	Ni, Karl	WA5b-3
Molisch, Andreas F.	TA1b-4	Niesen, Urs	WA4a-1
Monga, Vishal	WA5b-1	Nikiforov, Igor	WA3b-2
Montalban, Rafael	TA8b1-3	Nokleby, Matthew	TP2a-1
Montanari, Andrea	MA1b-4	Nordholm, Sven	TP7b-5
Mookherjee, Soumak	TP8a3-3	Noshad, Mohammad	MA8b1-16
Moon, Todd	MA8b2-10	Nounou, Hazem	TA8a2-13
Moon, Todd	MP8a2-3	Nounou, Mohamed	TA8a2-13
Moon, Todd K.	MP8a2-4	Nowak, Robert	WA3b-3
Moorthy, Anush	TP8b1-8	Ober, Raimund	TP6b-5
Moorthy, Anush	TP8b1-13	O'Donnell, Rich	MA8b2-8
Morency, Matthew	TP7a-1	O'Donoghue, Nicholas	WA7a-1
Morgado, Eduardo	MA8b1-8	Ogunfunmi, Tokunbo	MA5b-1
Morral, Gemma	TP1b-1	Øien, Geir Egil	MP4a-2
Mortazawi Molu, Mehdi	TP8a1-4	Oksanen, Jan	MP4a-4
Moses, Randolph	MA8b2-13	Olive-Marín, Jean-Christophe	MP7b-1
Mosquera, Carlos	MA8b1-1	O'Neill, Maire	TA6a-2
Mosquera, Carlos	MP8a1-4	Onic, Alexander	MA8b1-4
Moura, Jose M F.	TP2b-4	Oppenheim, Alan V.	MP8a2-6
Moura, Jose' M.F.	WA7a-1	Oppenheim, Irving	WA7a-1
Mukherjee, Amitav	WA1b-2	Orlando, Danilo	TA8a1-6
Mungara, Ratheesh	TP5b-1	Oyazun, Miguel	MA8b2-8
Murano, Emi Z.	MP7a-4	Ozdemir, Onur	TA8b1-12
Mushtaq, Aleem	TP7b-2	Ozel, Omur	MA4b-2
Muzammil, Rehan	TA8b3-5	Ozmen, Mustafa	MA4b-3
Nachum, Sapir	TP6b-1	Pajovic, Milutin	MA8b2-4
Nafie, Mohammed	TA8b1-2	Pal, Piya	TA3b-2
Nafie, Mohammed	TA8b1-11	Pal, Piya	TP3a-4
Naguib, Eman	TA8b1-2	Palaniappan, Ramanathan	TA5a-2
Naik, Manjish	MP8a2-13	Palmer, Jennifer	MP7b-2
Najafi, Seyedreza	TP8b1-12	Panahi, Ashkan	WA7b-1
Nanda, Rashmi	MA6b-3	Panayides, Andreas	MP5a-4
Nannarelli, Alberto	TA5b-1	Paolini, Enrico	WA1a-1
Nannarelli, Alberto	TA6b-4	Papadopoulos, Haralabos C.	TA3a-4
Nascimento, Vitor	TA8a2-8	Papandreou-Suppappola, Antonia	TP8b2-6
Nascimento, Vitor	TA8a2-11	Papandreou-Suppappola, Antonia	TP8b2-5
Nascimento, Vitor	TP2b-1	Parhi, Keshab	MA6b-1
Natesan Ramamurthy, Karthikeyan	WA5b-2		

NAME	SESSION	NAME	SESSION
Parhi, Keshab	TA7a-4	Raethjen, Jan	MA7b-3
Parhi, Keshab K.	TP8b2-4	Raghavan, Vasanthan	TA8b2-11
Park, Hyuncheol	TP8a1-2	Raj, Raghu	TA8a2-6
Park, Yun	TA7a-4	Rajan, Adithya	MA8b1-6
Parker, Jason	MA1b-1	Ramasamy, Dinesh	TA3b-1
Pascal, Frédéric	MA2b-4	Rambeloarison, Muriel L.	TP3a-2
Pastore, Adriano	TA8b2-10	Rambo-Roddenberry, Michelle	WA7a-2
Patel, Gaurav	MA3b-1	Ramos, Javier	MA8b1-8
Pattichis, Constantinos	MP5a-4	Ramprashad, Sean A.	TA3a-4
Pattichis, Marios	MP5a-1	Randel, Sebastian	TA1a-4
Pattichis, Marios	MP5a-4	Rangarajan, Sampath	TP6a-4
Patton, Lee	TA8a1-2	Rangarajan, Sampath	WA4a-4
Paul, Steffen	TP4a-1	Rao, Bhaskar	MA5b-4
Paulraj, Arogyaswami	TA8b2-2	Rao, Bhaskar	WA4b-2
Peleato, Borja	TP8a3-7	Rao, Bhaskar D.	WA2a-3
Pennanen, Harri	WA6b-2	Rao, Bhaskar D.	WA6a-3
Pepin, Matthew	MA8b2-6	Rasmussen, Jim	TA8a2-4
Perlaza, Samir	TA2a-4	Rasmussen, Lars K.	WA4a-2
Pesavento, Marius	MA2b-4	Ratnarajah, Tharm	TP5b-4
Pesavento, Marius	MP2a-4	Ratnarajah, Tharm	TP5b-5
Pesavento, Marius	MP2b-1	Ratnarajah, Tharm	TP8a2-7
Petricca, Massimo	TA5b-1	Ratnarajah, Tharmalingam	TA8b2-3
Petricca, Massimo	TA6b-4	Rauhut, Holger	MP1a-4
Phan, Thien	MP5a-2	Rawlings, Dustin	MP8a2-3
Phelps, Ethan	WA5b-3	Razavi, Seyed Morteza	TA8b2-3
Phillips, Braden	MP6b-2	Razavi, Seyed Morteza	TP5b-5
Phillips, Rhonda	TP8b1-2	Razaviyayn, Meisam	MP3b-4
Phillips, Rhonda	WA5a-1	Razaviyayn, Meisam	WA6b-1
Pi, Zhouyue	TA3a-3	Re, Marco	TA5b-1
Pitaval, Renaud-Alexandre	MP8a1-6	Re, Marco	TA6b-4
Pitaval, Renaud-Alexandre	MP8a1-7	Re, Marco	TA8b3-6
Plan, Yaniv	MP1a-2	Re, Marco	TP8a3-5
Pontarelli, Salvatore	TA8b3-6	Rebeiz, Eric	TA8b1-1
Pontifex, Damien	TP7b-4	Reddy, Bharath Kumar	TP5a-3
Poor, H. Vincent	MP4a-4	Renau, Alexandre	MA2b-3
Poor, H. Vincent	TA2a-4	Reyes Membreno, Carolina del Socorro ..	MP2a-1
Poor, H. Vincent	TP4b-2	Ribeiro, Alejandro	MP1b-2
Poulliat, Charly	WA4a-3	Ribeiro, Alejandro	TP1b-2
Pound, Andrew	MP8a2-4	Ricci, Giuseppe	TA8a1-6
Pourhomayoun, Mohammad	TA8a1-16	Ricci, Giuseppe	WA7b-2
Pourhomayoun, Mohammad	TP8a2-3	Richard, Cédric	WA3a-3
Pourhomayoun, Mohammad	TP8b2-3	Richmond, Christ D.	MA2b-2
Prasad, Narayan	MP3b-3	Rico-Alvaríño, Alberto	MA8b1-1
Preisig, James	MA8b2-4	Riedl, Thomas	MP1b-4
Preisig, James	TP3b-5	Riegler, Erwin	TP2a-4
Prince, Jerry	MP7a-4	Riihijarvi, Janne	MP4b-2
Pugh, Matthew	MP8a1-12	Riihonen, Taneli	MA3b-4
Pugh, Matthew	TA8b1-7	Riihonen, Taneli	MA8b1-12
Purmehdi, Hakimeh	TA8b2-7	Riihonen, Taneli	WA4b-1
Raake, Alexander	TA5a-4	Ritcey, James	TA8b2-9
Rabbat, Michael	TP8a2-8	Ritcey, James	WA1b-1
Radhakrishnan, Chandrasekhar ..	WA3a-2	Ritz, Justin	TA7b-2
Radhakrishnan, Chandrashekar ..	TA8a2-14	Rodriguez, Arturo	TP8b1-9
Raeman, David	MA8b2-8		

NAME	SESSION
Rodríguez Fonollosa, Javier.....	TA8b2-10
Rodríguez-Marek, Esteban.....	TP8b1-7
Roemer, Florian.....	WA7b-3
Rohde, G.K.....	TP6b-3
Rolny, Raphael.....	TA8b2-1
Rolny, Raphael.....	WA2a-2
Romberg, Justin.....	MP8a2-11
Romberg, Justin.....	TA3b-3
Römer, Florian.....	MP2b-2
Romero, David.....	MP8a1-2
Romero, David.....	TP5a-2
Roozgard, Aminmohammad.....	TP8b1-5
Roozgard, Aminmohammad.....	TP8b1-6
Roque, Damien.....	TA8b1-9
Ross, Jeremy.....	WA5a-4
Rossi, Marco.....	MP8a2-15
Rossler, Carl.....	MA8b2-13
Rotolo, Anthony.....	MA8b2-7
RoyChowdhury, Sohini.....	TP8b2-4
Rozell, Christopher J.....	MP8a2-11
Ruan, Liangzhong (Steven).....	MP3b-2
Rübsamen, Michael.....	MP2a-4
Rupp, Markus.....	MP2a-1
Rupp, Markus.....	TA8a2-3
Rupp, Markus.....	TP2a-3
Rusek, Fredrik.....	MP3a-3
Ryf, Roland.....	TA1a-4
S Varma, Vineeth.....	TA2a-3
Saad, Michele.....	MP5a-3
Sabharwal, Ashutosh.....	MA3b-1
Sabharwal, Ashutosh.....	TP6a-1
Sabharwal, Ashutosh.....	WA1a-2
Sadeghian, Masoud.....	TA6b-2
Sahai, Achaleshwar.....	MA3b-1
Sahraeian, Sayed Mohammad Ebrahim.....	TA7a-3
Sala, Frederic.....	TP4a-2
Sale, Darryl.....	MP8a2-11
Saleh, Ghada.....	TA8b1-11
Saloranta, Jani.....	MA8b2-9
Sanders, Wes.....	TA7b-2
Sankar, Lalitha.....	TP4b-2
Santhanam, Balu.....	MA8b2-6
Santiago, Dan.....	TA8b3-4
Saville, Michael.....	TA8a1-2
Sayed, Ali.....	MP1b-3
Sayed, Ali.....	TA4a-3
Sayed, Ali.....	TP2b-1
Sayed, Ali.....	WA2a-4
Scaglione, Anna.....	MP1b-1
Scaglione, Anna.....	TP2b-3
Scaglione, Anna.....	TP4b-4
Schad, Adrian.....	MP2b-1
Schaeffer, Hayden.....	MP5b-3

NAME	SESSION
Scharf, Louis.....	TP3a-3
Scharf, Louis L.....	TA8b1-6
Schenk, Andreas.....	MA8b1-4
Schlechter, Thomas.....	MA8b1-10
Schniter, Phil.....	MA3b-2
Schniter, Philip.....	MA1b-1
Schniter, Philip.....	TP6a-2
Schober, Robert.....	MP3a-1
Schrammar, Nicolas.....	WA2b-3
Schrammar, Nicolas.....	WA4a-2
Schreck, Jan.....	TP8a1-7
Schroeder, Jim.....	MA8b1-14
Schroeter, Carola.....	WA7b-3
Schulte, Michael.....	MP6b-3
Schumer, Sean.....	MA8b2-7
Seco-Granados, Gonzalo.....	TA8b1-3
Seifallah Jardak, Jardak.....	TP7a-4
Sellathurai, Mathini.....	TA8b2-3
Seo, Sung Lock.....	WA6a-1
Serpedin, Erchin.....	TA8a2-13
Seto, Koji.....	MA5b-1
Severi, Stefano.....	MA8b2-9
Severinghaus, Robert.....	MP8a1-10
Sezgin, Aydin.....	WA1a-3
ShahbazPanahi, Shahram.....	MP2b-3
ShahbazPanahi, Shahram.....	WA6b-3
Shanbhag, Naresh.....	MA6b-4
Shariati, Nafiseh.....	MP8a1-11
Sharma, Amy.....	MP7b-2
Shen, Hao.....	TP5a-4
Sheng, Jia.....	MA8b1-13
Shi, Jianing.....	MP1a-1
Shi, Qingjiang.....	WA6b-1
Shi, Wei.....	TA8b2-9
Shi, Wei.....	WA1b-1
Shin, Won-Yong.....	TA8b2-2
Shirani, Shahram.....	TP8b1-10
Shirani, Shahram.....	TP8b1-11
Shirani, Shahram.....	TP8b1-12
Shtaif, Mark.....	TA1a-2
Shynk, John J.....	TA8a2-5
Siclet, Cyrille.....	TA8b1-9
Siegel, Paul H.....	TA2b-4
Siegmund, David.....	MA8b1-2
Siffert, Robert.....	TP8b2-1
Sigurdson, Ryan.....	WA5b-4
Sinanovic, Sinan.....	TP8a1-8
Singer, Andrew.....	MA6b-4
Singer, Andrew.....	MP1b-4
Singer, Andrew.....	TP2b-2
Singer, Andrew.....	WA3a-2
Sinopoli, Bruno.....	TA4b-1
Siohan, Pierre.....	TA8b1-9
Sirkeci-Mergen, Birsen.....	TP8a1-10

NAME	SESSION	NAME	SESSION
Skoglund, Mikael	WA2b-3	Swenson, Brian	TP1b-4
Skoglund, Mikael	WA4a-2	Swindlehurst, A. Lee	MP8a2-12
Slepcev, D.	TP6b-3	Swindlehurst, A. Lee	TA8b1-3
Slock, Dirk	TP5b-3	Swindlehurst, Arnold	TP3a-1
Slottke, Eric	WA2a-2	Swindlehurst, Lee	TP8a2-4
Sluciak, Ondrej	TP2a-3	Sylvester, Dennis	TA6a-3
Sohn, Jongwook	TA5b-4	Taghizadeh Motlagh, Seyed Omid	TP6a-3
Solh, Mashhour	TP8b1-18	Taheri, Omid	WA3b-1
Soljanin, Emina	TA1a-1	Tai, Ying	TA2b-2
Song, Xiufeng	TP7a-2	Tajan, Romain	WA4a-3
Soo Min, Lee	TP1a-2	Tajer, Ali	MP3b-3
Sorensen, Mikael	TA8a1-11	Talwar, Saurabh	WA6b-3
Spanias, Andreas	TP2a-2	Tan, Sam	WA5a-3
Spanias, Andreas	WA5b-2	Tang, Yi	WA2b-2
Spanias, Andreas	WA7a-3	Tang, Zijian	TP3b-2
Spors, Sascha	MA8b2-3	Tay, Wee Peng	TP1b-3
Springer, Andreas	MA8b1-9	Tayem, Nizar	MA8b2-5
Srikant, R.	TP1a-3	Tehrani, Pouya	TA8b1-4
Stafford, Phillip	TP8b2-6	Temel, Dogancan	TA5a-3
Stan, Mircea	TA6a-1	ten Brink, Stephan	MP3a-2
Stanacevic, Milutin	MA8b2-14	ten Brink, Stephan	TA8b2-6
Stanacevic, Milutin	MA8b2-15	Tepedelenioglu, Cihan	MA8b1-6
Stanczak, Slawomir	TP8a1-7	Tepedelenioglu, Cihan	TP2a-2
Stanczak, Slawomir	WA1b-4	Tepedelenioglu, Cihan	TP8a1-3
Stankovic, Lina	TP8b1-3	Tepedelenioglu, Cihan	TP8a2-2
Stankovic, Vladimir	TP8b1-3	Tervo, Valtteri	MP8a1-5
Starr, Jonathan	MA6b-2	Thibeaux, Roman	MP7b-1
Stavridis, Athanasios	TP8a1-8	Thiele, Lars	TA8b2-4
Steffens, Christian	MP2a-4	Thiele, Lars	TA8b2-12
Steve, Simske	TP8b1-14	Thomas, Robert J.	TP4b-4
Stine, James	TA6b-2	Thornton, Trevor	WA7a-3
Stojanovic, Milica	TP3b-1	Thottan, Marina	TP4b-3
Stone, Maureen	MP7a-4	Tian, Songlin	MA8b1-3
Stow, Dylan	TA6b-3	Tiong, Ying	MP6b-2
Strakova, Hana	TP2a-3	Tirkkonen, Olav	MP8a1-6
Strohmer, Thomas	MP1a-4	Tirkkonen, Olav	MP8a1-7
Studer, Christoph	MP1a-1	Togneri, Roberto	TP7b-4
Studholm, Colin	MA7b-1	Togneri, Roberto	TP7b-5
Su, Che-Chun	TA5a-1	Tölli, Antti	MP8a1-5
Su, Guolong	MP8a2-6	Tölli, Antti	WA6b-2
Su, Hsuan-Jung	MP4b-1	Toni, Laura	TA1b-2
Sugavanam, Nithin	TP1a-4	Tu, Sheng-Yuan	MP1b-3
Sui, Chao	TP7b-4	Tufvesson, Fredrik	MP3a-3
Sullivan, Michael	MP6a-3	Tummala, Murali	MP8a1-10
Summerson, Samantha	WA2b-4	Tuninetti, Daniela	WA1a-3
Sun, Jinping	MA8b2-11	Tutuncuoglu, Kaya	MA4b-1
Sun, Liang	WA6a-2	Tuuk, Peter	MP8a2-17
Sun, Ruoyu	MP3b-4	Tygel, Martin	TA8a1-14
Sun, Yang	TP5a-4	Ulukus, Sennur	MA4b-2
Swami, Ananthram	TA8b1-8	Urriza, Paulo	TA8b1-1
Swartzlander, Earl	MP6a-3	Usman Khan, Muhammad	MP6b-2
Swartzlander, Earl	TA6a-2	Utschick, Wolfgang	TA8b2-5
Swartzlander, Jr., Earl	TP8a3-6	Utschick, Wolfgang	TA8b2-8
Swartzlander, Jr., Earl E.	TA5b-4	Vaccari, Andrea	TP6b-1

NAME	SESSION	NAME	SESSION
Vadivel, Karthikeyen Shanmuga...	TP6b-2	Wilcox, Dave.....	TP8a2-7
Vaezi, Mojtaba	TP8b1-1	Wild, Thorsten	MP3a-2
Vaidyanathan, P. P.....	MP5b-1	Willerton, Marc.....	WA7a-3
Vaidyanathan, P. P.....	MP8a1-9	Willett, Peter	TA8a1-9
Vaidyanathan, P. P.....	TA3b-2	Willett, Peter	TP3b-3
Vaidyanathan, P. P.....	TP3a-4	Willett, Peter	TP7a-2
Vakili, Sattar.....	TA8b1-8	Williams, Gustavious P.	MP8a2-4
van der Schaar, Mihaela.....	TA2a-1	Winkelbauer, Andreas.....	WA6b-4
van der Veen, Alle-Jan.....	TP8a2-11	Winzer, Peter	TA1a-1
Vannithamby, Rath	MP4b-3	Winzer, Peter	TA1a-4
Varshney, Pramod	TA8b1-12	Witte, Matthias.....	MA7b-4
Vedadi, Farhang	TP8b1-10	Wittneben, Armin	TA8b2-1
Venkateswaran, Sriram	TA3b-1	Wittneben, Armin	WA2a-2
Venkitasubramaniam, Parv.....	TA4b-3	Woo, Jonghye.....	MP7a-4
Venosa, Elettra	MA8b1-15	Woods, Roger.....	MP6b-1
Verma, Pramode.....	TP8b1-5	Wu, Jinhong.....	MA8b1-13
Verma, Pramode.....	TP8b1-6	Wu, Michael.....	TA8b3-3
Vese, Luminita	MP5b-3	Xaver, Florian	MP2a-2
Viberg, Mats	WA7b-1	Xavier, Joao.....	TP2b-4
Villalba, Julio.....	MP6a-2	Xiao, Qiang.....	TP8a1-9
Vishwanath, Arun.....	TA2a-2	Xiao, Yuanzhang	TA2a-1
Vojcic, Branimir.....	MA8b1-13	Xie, Yao	MA8b1-2
Vorobyov, Sergiy.....	TP7a-1	Xin, Yan	WA4a-4
Vorobyov, Sergiy A.	WA3b-1	Xing, Fangxu	MP7a-4
Voyles, Richard.....	MP8a2-8	Xu, Aolin	MA6b-4
Vu, Phong.....	MP5a-2	Yaakobi, Eitan.....	TA2b-4
Vuppala, Satyanaranaya	WA1b-3	Yang, Hong.....	MP3a-4
W. H. Khong, Andy	TA8a2-7	Yang, Hyun Jong	TA8b2-2
Wadood Majid, Mohammad.....	WA5a-4	Yang, Liuqing.....	TA8b1-6
Wagner, Kevin	WA3a-4	Yang, Sheng	TP5b-2
Wai, Hoi-To	MP3b-1	Yang, Wen-Yun.....	TA7b-4
Wakin, Michael	MP1a-3	Yeatman, Eric	WA7a-3
Walters, George.....	TA5b-3	Yellepeddi, Atulya	TP3b-5
Wang, Chao.....	WA4a-2	Yener, Aylin	MA4b-1
Wang, Guohui.....	TA8b3-3	Yerramalli, Srinivas	TP3b-2
Wang, Guohui.....	TP5a-4	Yi, Xinping	TP5b-2
Wang, Jiaheng.....	MP8a1-11	Yilmaz, Ferkan.....	MP4a-2
Wang, Junsong.....	MP4b-4	Yin, Bei	TA8b3-3
Wang, Qi.....	MA8b2-6	Yin, Bei	TP5a-4
Wang, Qing.....	MP4b-4	Ylioinas, Jari	TA8b3-2
Wang, Tong.....	WA2b-1	Yoon, Byung-Jun	TA7a-3
Wang, W.	TP6b-3	Young, Derek.....	TA8b1-7
Wang, Xiaodong	MP3b-3	Yu, Bea	TP8b1-2
Wang, Yue	TA2b-1	Yu, Zhenhua	TA8a1-1
Wang, Zhanyong	TA7b-4	Yue, Xiaodong	MA8b1-3
Wang, Zhaohui	TP3b-3	Zakharov, Yuriy.....	TA8a2-8
Wang, Zhengdao	TP3b-3	Zakharov, Yuriy.....	TA8a2-11
Wang, Zhifang	TP4b-4	Zaragoza-Martínez, C. C.	TA8a1-4
Weiss, Anthony J.	MA8b2-2	Zasowski, Thomas.....	TA8b2-1
Wen, Qingsong.....	WA7a-4	Zeng, Yong	MP2b-4
Werner, Stefan.....	MA8b1-12	Zerguine, Azzedine.....	TA8a2-10
Wichman, Risto	MA8b1-12	Zerguine, Azzedine.....	WA2a-4
Wichman, Risto	WA4b-1	Zhang, Fan	TP8a1-5
Wiegand, Till.....	TP4a-1	Zhang, Jianshu	MP2b-2

NAME	SESSION
Zhang, Jianshu	TP6a-3
Zhang, Jianzhong	TA3a-3
Zhang, Jun	MP8a2-5
Zhang, Jun Jason	MP8a2-8
Zhang, Jun Jason	TP8b2-5
Zhang, Rui	MP2b-4
Zhang, Xiaojie (Eric)	TA2b-4
Zhang, Xue	WA7a-3
Zhao, Qing	TA8b1-4
Zhao, Qing	TA8b1-8
Zhao, Xiaochuan	TA4a-3
Zhao, Yong	TP7b-3
Zheng, Lizhong	WA2b-1
Zhou, G. Tong	TA8a1-1
Zhou, Shengli	TP3b-3
Zhou, Shengli	TP7a-2
Zhou, Xuefu	MA8b1-3
Zorzi, Michele	TP3b-4
Zu, Keke	MP8a1-3
Zuk, Or	TA7a-2
Zummo, Salam	WA2a-4

NAME	SESSION
------	---------

Notes

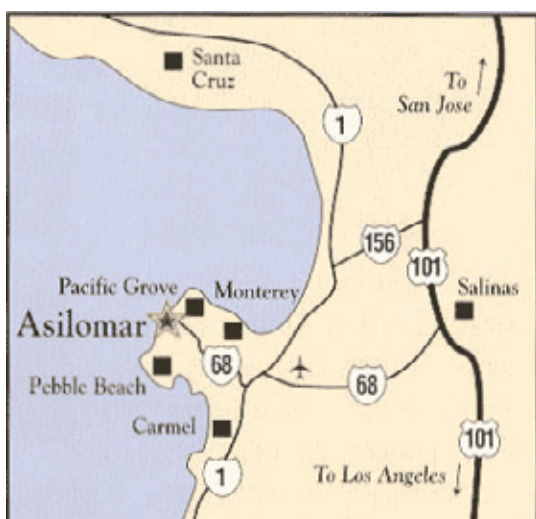
Notes

Notes

Notes

Notes

Notes



SS&C Conf. Corp.

P.O. Box 8236

Monterey, CA 93943