SS&C Conf. Corp. P.O. Box 8236 Monterey, CA 93943 FORTY-SIXTH
ASILOMAR CONFERENCE ON
SIGNALS, SYSTEMS AND
COMPUTERS



November 4–7, 2012 Asilomar Hotel and Conference Grounds

Technical Co-sponsor

Signal Processing Society

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FORTY-SIXTH ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS & COMPUTERS

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IEEE SIGNAL PROCESSING SOCIETY

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

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

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Department of Electrical &
Computer Engineering
Florida State University
Tallahassee, FL 32310-6046
E-mail:

Linda.debrunner@eng.fsu.edu

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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

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

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

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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

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Private Consultant rhippenstiel@yahoo.com

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

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

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

PROF. KEITH A. TEAGUE

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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

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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.tudarmstadt.de

F. Biomedical Signal and Image **Processing**

Prof. Arve Nehorai Washington University at St.

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: a.i.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 PMRegistration — Main Lodge4:00 - 6:30 PMStudent Paper Contest — Merrill Hall7:00 - 9:00 PMWelcoming 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)

'P8b1 Speech, Image, and Video Processing (Poster)

TP8b2 Biomedical Signal and Image Processing (Poster)

Tuesday 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 F

"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 I

"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 Beamspace Design for Direction Finding in Colocated MIMO Radar with Arbitrary Receive Array and Even Number of Waveforms" Arash Khabbazibasmenj, 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-Nyquistrate 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	10:15 AM
	Estimation: A Solution to the Gridding Proble	em?
	Philip Schniter, Ohio State University; Christian A	ustin,
	MIT Lincoln Laboratory; Jason Parker, Air Force	
	Research Laboratory	

- MA1b-2 Local Consensus Estimators for Distributed 10:40 AM Learning of Graphical Models Qiang Liu, Alexander Ihler, University of California, Irvine
- MA1b-3 Sparse Covariance Selection with Edge 11:05 AM Restrictions

 Anastasios Kyrillidis, Volkan Cevher, École Polytechnique Fédérale de Lausanne
- MA1b-4 Learning Graphical Models for Dynamical 11:30 AM Processes

 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 10:15 AM Unconditional Direction-of-Arrival Estimation Yuri I. Abramovich, Defence Science and Technology Organisation; Ben A. Johnson, Lockheed Martin Australia and ITR
- MA2b-2 Aspects of Threshold Region Mean-Squared 10:40 AM Error Prediction: Method of Interval Errors, Bounds, Taylor's, and Extensions

 Christ D. Richmond, Larry L. Horowitz, MIT Lincoln Laboratory
- MA2b-3 Lower Bounds on the MSE for Mixed 11:05 AM Far-Field and Near-Field Sources Direction-of-Arrivals

 Alexandre Renaux, Rèmy Boyer, Paris XI Univ.; Sylvie Marcos. CNRS
- MA2b-4 On the Resolvability of Closely Spaced 11:30 AM
 Targets Using a MIMO Radar
 Mohammed Nabil El Korso, Technische Universität
 Darmstadt; Frédéric Pascal, Supélec / SONDRA; 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 10:15 AM		
	Full-duplex Designs		
	Achaleshwar Sahai, Gaurav Patel, Ashutosh Sabharwal,		
	Rice University		

MA3b-2 Hardware and Environmental 10:40 AM
Phenomenological Limits on Full-Duplex MIMO
Relay Performance
Daniel Bliss, Timothy Hancock, Massachusetts Institute of
Technology: Phil Schniter, Ohio State University

MA3b-3 Open Problems in Full Duplex Wireless

Phil Levis, Stanford University

11:05 AM

MA3b-4 Analog and Digital Self-Interference Cancellation in Full-Duplex MIMO-OFDM Transceivers with Limited Resolution in A/D Conversion

Taneli Rithonen, Aalto University

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 10:15 AM with Energy Storage Imperfections

 Kaya Tutuncuoglu, Aylin Yener, Penn State
- MA4b-2 Information-Theoretically Achievable Rates 10:40 AM in an Energy Harvesting Broadcast Channel Omur Ozel, Sennur Ulukus, University of Maryland
- MA4b-3 Throughput and Energy Efficiency under
 Queueing and Secrecy Constraints
 Mustafa Cenk Gursoy, Mustafa Ozmen, Syracuse
 University

 11:05 AM
- MA4b-4 Non-Invasive Green Small Cell Network 11:30 AM
 Baher Mawlawi, Ejder Bastug, Chahé Nerguizian, Sylvain
 Azarian, Mérouane Debbah, Supelec

Session MA5b Voice Coding (invited)

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

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

 Jerry Gibson, University of California, Santa Barbara

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 ΣΔ Modulators for Low-power Digitally 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 Oueensland
- 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 Radarbased 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 Widebeam 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 1:30 PM
 Priors on Compressive Sensing Performance
 Arian Maleki, Christoph Studer, Jianing Shi, Richard
 Baraniuk, Rice University
- MP1a-2 Structured Signal Recovery from Single-Bit 1:55 PM
 Measurements
 Yaniv Plan, University of Michigan
- MP1a-3 CoSaMP with Redundant Dictionaries 2:20 PM

 Mark Davenport, Stanford University; Deanna Needell,

 Claremont McKenna College; Michael Wakin, Colorado
 School of Mines
- MP1a-4 Compressed Sensing with Radar Applications 2:45 PM

 Max Hugel, Holger Rauhut, University of Bonn; Thomas

 Strohmer, University of California, Davis

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

Chair: Michael Rabbat, McGill University

MP1b-1 Dynamics of Social Connections 3:30 PM Lin Li, Anna Scaglione, University of California, Davis

MP1b-2	Dynamic Games with Side Information in	3:55 PM	MP2b-4	Improving Achievable Rate for the Two-User 4:45 PM
	Economic Networks Ceyhun Eksin, Pooya Molavi, Alejandro Ribeiro, University of Pennsylvania			SISO Interference Channel with Improper Gaussian Signaling Yong Zeng, Mustafa Cenk Yetis, Erry Gunawan, Yong
MP1b-3	Adaptive Decision-Making over Complex Networks	4:20 PM		Liang Guan, Nanyang Technological University; Rui Zhang, National University of Singapore
	Sheng-Yuan Tu, Ali Sayed, University of California, Angeles	Los	Session 1	MP3a Large-Scale MIMO Systems (special
MP1b-4	A Factor Graph Approach to Diffusion	4:45 PM		session)
	Adaptive Filtering Methods Andrew Bean, Thomas Riedl, Andrew Singer, Univer- Illinois, Urbana-Champaign	sity of		: Tom Marzetta, Alcatel-Lucent/Bell-Labs and Saif K. d, Linköping University
Session	MP2a Source Localization in Distrib	uted	MP3a-1	Spectral Efficiency in Large-Scale 1:30 PM
Session .	Sensor Arrays (invited)			MIMO-OFDM Systems with Per Antenna Power Cost
Chair: Chr	istoph Mecklenbräuker, TU Vienna			Derrick Wing Kwan Ng, Robert Schober, University of British Columbia
MP2a-1	Convergence Analysis of Distributed PAST Based on Consensus Propagation	1:30 PM	MP3a-2	On Coherent Combining of Distributed 1:55 PM Observations
MD2 - 2	Carolina del Socorro Reyes Membreno, Markus Rup Vienna University of Technology			Jakob Hoydis, Supelec; Thorsten Wild, Stephan ten Brink, Bell Laboratories, Alcatel-Lucent; Mérouane Debbah, Supelec
MP2a-2	Localization of Acoustic Sources Utilizing a Decentralized Particle Filter Florian Xaver, Gerald Matz, Vienna University of	1:55 PM	MP3a-3	Measured Propagation Characteristics for Very Large MIMO at 2.6 GHz
	Technology; Peter Gerstoft, University of California Diego; Norbert Görtz, Vienna University of Technology			Xiang Gao, Fredrik Tufvesson, Ove Edfors, Fredrik Rusek, Lund University
MP2a-3	Bayesian Sparse Sensing of the Japanese 2011 Earthquake	2:20 PM	MP3a-4	Decentralized (Cell-Free) Large-Scale 2:45 PM Antenna System
	Peter Gerstoft, University of California, San Diego; Christoph Mecklenbräuker, Vienna University of			Alexei Ashikhmin, Thomas L Marzetta, Bell Laboratories, Alcatel-Lucent; Hong Yang, Alcatel-Lucent
MD2 - 4	Technology	2.45 DM	Session	MP3b Coordinated Multipoint (invited)
MP2a-4	Distributed Source Localization in Subarray Sensor Networks. Christian Steffens, Michael Rübsamen, Marius Pesa	2:45 PM	Chair: Win	ng-Kin Ma, The Chinese University of Hong Kong
	Technische Universität Darmstadt		MP3b-1	A Decentralized Method for Joint Admission 3:30 PM Control and Beamforming in Coordinated Multicell
	MP2b Network Beamforming (invite			Downlink
Chair: Sha Technolog	hram Shahbazpanahi, University of Ontario Inst y	itute of) (D21 - 2	Hoi-To Wai, Wing-Kin Ma, Chinese University of Hong Kong
MP2b-1	Distributed Beamforming in Coarsely	3:30 PM	MP3b-2	Analyzing the IA Feasibility Problem via 3:55 PM New Tools from Algebraic Geometry
WII 20-1	Synchronized Relay Networks Adrian Schad, Technische Universität Darmstadt;	3.50 T WI		Liangzhong (Steven) Ruan, Vincent Lau, Hong Kong University of Science and Technology
	Babak Khalaj, Sharif University of Technology; Mar Pesavento, Technische Universität Darmstadt	ius	MP3b-3	Design of Coordinated Multi-Point (CoMP) 4:20 PM Transmission and Reception Schemes for the 4G
MP2b-2	Distributed Beamforming for Two-Way Relaying Networks with Individual Power	3:55 PM		Cellular Downlink Narayan Prasad, NEC Laboratories America, Inc.; Ali
	Constraints Jianshu Zhang, Florian Römer, Martin Haardt, Tech	nische		Tajer, Princeton University; Xiaodong Wang, Columbia University
1 (D21 - 2	Universität Ilmenau	4.20 DM	MP3b-4	Joint Transceiver Design and Base Station 4:45 PM
MP2b-3	Beamforming Design for Two-Way Relay Networks Under Per-Node Power Constraint Shahram ShahbazPanahi, University of Ontario; Yin Jing, University of Alberta	4:20 PM di		Clustering for Heterogeneous Networks 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 1:30 PM Spectrum Sensing Dyonisius Dony Ariananda, Geert Leus, Delft University of Technology

MP4a-2 On Hybrid Cooperation in Underlay
Cognitive Radio Networks
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

MP4a-3 Sequential Good Channel Search for 2:20 PM
Multi-channel Cognitive Radio
Raied Caromi, Seshadri Mohan, University of Arkansas,
Little Rock; Lifeng Lai, Worcester Polytechnic Institute

MP4a-4 A Sensing Policy Based on Confidence 2:45 PM Bounds and a Restless Multi-armed Bandit Model Jan Oksanen, Visa Koivunen, Aalto University; H. Vincent Poor, Princeton University

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

Chair: KC Chen, National Taiwan University

MP4b-1 Not Every Bit Counts: Shifting the Focus 3:30 PM from Machine to Data for Machine-to-Machine Communications

Chih-Hua Chang, Hung-Yun Hsieh, Hsuan-Jung Su, National Taiwan University

MP4b-2 Exploring Utility-based Optimization and 3:55 PM Management for Wireless Sensor Networks and Machine-to-Machine Communications

Petri Mähönen, Janne Riihijarvi, RWTH Aachen
University

MP4b-3 Controlling Access Overload and Signaling 4:20 PM
Congestion in M2M Networks
Rath Vannithamby, Intel Corporation

MP4b-4 Dynamic Spectrum Allocation under
Cognitive Cellular Network for M2M Applications
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

Session MP5a Image and Video Coding (invited)

Chair: Marios Pattichis, University of New Mexico

MP5a-1 Dynamically Reconfigurable AVC 1:30 PM
Deblocking Filter with Power and Performance
Constraints
Yuebing Jiang, Marios Pattichis, University of New
Mexico

MP5a-2 On the Use of Image Quality Estimators for 1:55 PM Improved JPEG2000 Coding

Thien Phan, Phong Vu, Damon Chandler, Oklahoma State University

MP5a-3 Blind Quality Assessment of Videos Using a Model of Natural Scene Statistics and Motion Coherency

Michele Saad, Al Bovik, University of Texas at Austin

MP5a-4 The Emerging High Efficiency Video Coding 2:45 PM Standard for Developing Wireless Ultrasound Video Telemedicine Systems

Andreas Panayides, Zinon Antoniou, University of Cyprus;

Marios Pattichis, University of New Mexico; Constantinos Pattichis, University of Cyprus

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

Chair: Vishal Monga, Penn State University

MP5b-1 Compressive Sensing and Sparse Array 3:30 PM
Processing
P. P. Vaidyanathan, California Institute of Technology

MP5b-2 Single-Image Super-Resolution Using 3:55 PM
Multihypothesis Prediction
Chen Chen, James Fowler, Mississippi State University

MP5b-3 L-infinity Regularized Models for 4:20 PM Segmentation, Cartoon-Texture Decomposition, and Image Restoration

Hayden Schaeffer, Luminita Vese, University of California, Los Angeles

MP5b-4 Implicit Gibbs Prior Models for Tomographic 4:45 PM
Reconstruction
Pengchong Jin, Eri Haneda, Charles Bouman, Purdue
University

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

Milos D. Ercegovac, University of California, Los Angeles; Robert McIlhenny, Californi State University Northridge

MP6a-2 Decimal On-line Multioperand Addition 1:55 PM

Carlos Garcia-Vega, Sonia Gonzalez-Navarro, Julio
Villalba, Emilio L. Zapata, University of Malaga

MP6a-3	Variable-Accuracy Multiplication Using Approximate Binary Logarithms and Parallel Correction	2:20 PM Error	Session 1	MP7b Biological Modeling and Signa Analysis (partly invited)	ıl	
	Michael Sullivan, Earl Swartzlander, University of T	Texas	Chair: Sco	tt T. Acton, University of Virginia		
MP6a-4	at Austin Experiments with Multiplier Reduction Trees Neil Burgess, David Lutz, ARM	2:45 PM	MP7b-1	Cell Mechanics Analysis by Physically-Constrained Optical Flow Jean-Christophe Olivo-Marin, Timothee Lecomte,	3:30 PM	
Session	MP6b Reconfigurable Architectures	, Many-		Alexandre Dufour, Nancy Guillen, Roman Thibeaux,		
	Core, Multi-Core, and SoC (in	nvited)) (DZI - 2	Institut Pasteur	2.55 D) (
Chair: <i>Nei</i>	l Burgess, ARM		MP7b-2	Exploitation of Radar Doppler Signatures for Gait Analysis	3:55 PM	
MP6b-1	FPGA-based Processor Solution for Front-End Image Detection Applications	3:30 PM		Jennifer Palmer, Kristin Bing, Amy Sharma, Georgia Research Institute		
	Colm Kelly, Thales Air Defence Limited; Roger Woo Queen's University Belfast	ods,	MP7b-3	A Third-Order Approximate Solution of the 4:20 PM EEG Forward Problem in Four-Shell Ellipsoidal		
MP6b-2	Is There a Smarter Way to Use 100 Billion Transistors?	3:55 PM		Geometry D. Gutiérrez, M. Alcocer-Sosa, Center of Research a Advanced Studies	nd	
	Muhammad Usman Khan, Francis Li, Ying Tiong, M Liebelt, Brian Ng, Braden Phillips, University of Ad		MP7b-4	Phase Congruency Singular Value	4:45 PM	
MP6b-3	Performance and Power Optimizations for Accelerated Processing Units Michael Schulte, AMD	4:20 PM		Decomposition for Multi-Scale Neuron Enhancement Emmanuel Denloye-Ito, Scott Acton, University of Vi	rginia	
MP6b-4	Reliable Low Power Distributed Arithmetic	4:45 PM	Session MP8a1 MIMO Communications and Signal			
	Filters via N-modular Redundancy	7 J:		Processing I		
Muhammad S. Khairy, AmirHossein Gholamipour, Fadi J. Kurdahi, Ahmed M. Eltawil, University of California, Irvine			Chair: And (EPFL)	lreas Burg, Ecole Polytechnique Federale de Lau	ısanne	
Session	MP7a Medical Image Analysis			1:30 PM	- 3:10 PM	
	jandro F. Frangi, Alejandro F Frangi, Universit Sheffield, UK; Universitat Pompeu Fabra, Barce		MP8a1-1	Low-Complexity Vector Precoding for Multi-u Systems		
Spain MP7a-1	4D Signal Processing for Spatio-Temporal	1:30 PM		Maitane Barrenechea, University of Mondragon; An Burg, École Polytechnique Fédérale de Lausanne; M Mendicute, University of Mondragon		
	Analysis of Longitudinal 3D Imagery		MP8a1-2			
MP7a-2	Guido Gerig, University of Utah Computational Diffusion MRI: On Some Recent Advances and Beyond	1:55 PM		for High Spectral Efficiency in MIMO Nicholas Chang, David Romero, MIT Lincoln Labora		
	Rachid Deriche, INRIA Sophia Antipolis		MP8a1-3	Low-Complexity Lattice Reduction-Aided Cha		
MP7a-3	Analytics for Time-Varying Catheterization Imaging Data: A Probabilistic Approach	2:20 PM		Inversion Methods for Large Multi-User MIMO Keke Zu, Rodrigo C. de Lamare, University of York; Martin Haardt, Ilmenau University of Technology) Systems	
MP7a-4	Ioannis Kakadiaris, University of Houston Estimating 3D Tongue Motion with MR Images	2:45 PM	MP8a1-4	Multiuser Detection Performance in Multibean Links under Imperfect CSI Jesús Arnau, Carlos Mosquera, University of Vigo	ı Satellite	
	Fangxu Xing, Junghoon Lee, Johns Hopkins Univer		MP8a1-5	On Convergence Constraint Precoder Design fo	or Iterative	
Emi Z. Murano, University of Maryland; Jonghye V Johns Hopkins University; Maureen Stone, Univers Maryland Dental School; Jerry Prince, Johns Hopl University		ity of	ivii oui-5	Frequency Domain Multiuser SISO Detector Valteri Tervo, Antti Tölli, University of Oulu; Juha Karjalainen, Renesas Mobile Europe Oy; Tad Matsu Japan Advanced Institute of Science and Technology	moto,	
			MP8a1-6	Grassmannian Packings from Orbits of Project Representations Renaud-Alexandre Pitaval, Olav Tirkkonen, Aalto University	ive Group	

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 N	MP8a2 Signal Processing and Adaptive
	Systems I
Chair: Lu C Sinica	Chun-Shien, Institute of Information Science, Academia
	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

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
- Using Dictionary Learning for Improving Hyperspectral MP8a2-4 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

- A Variable Regularization Control Method for NLMS MP8a2-7 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,
- 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

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

TA1a-2	Modeling of Linear and Nonlinear Coupling in Multiple-Mode Fiber Optic Transmission w MIMO Signal Processing Cristian Antonelli, Antonio Mecozzi, University of L'Aquila; Mark Shtaif, Tel Aviv University	8:40 AM vith	TA2a-4	Learning Efficient Satisfaction Equilibrium via Trial and Error in Decentralized Wireless Networks Samir Perlaza, Princeton University; Zhu Han, Univerflowston; H. Vincent Poor, Princeton University	9:30 AM
TA1a-3	Mode Coupling in Coherent Mode-Division-Multiplexed Systems: Impact Capacity and Signal Processing Complexity Joseph Kahn, Stanford University; Keang-Po Ho, S			TA2b Coding Theory for the Next- Generation Storage Systems (in a Dolecek, University of California, Los Angeles	nvited)
TA1a-4	Image Experimental Characterization of the Fiber-Optic MIMO Channel Sebastian Randel, Roland Ryf, Peter Winzer, Bell Laboratories, Alcatel-Lucent	9:30 AM	TA2b-1	Content-assisted File Decoding for Nonvolatile Memories Anxiao Jiang, Yue Li, Yue Wang, Texas A&M Univers Jehoshua Bruck, California Institute of Technology	10:15 AM <i>ity;</i>
	TA1b Wireless Video Transmission (invited)	Systems	TA2b-2		10:40 AM
TA1b-1	dreas Molish, University of Southern California Enhanced Adaptive Streaming over LTE-Advanced Wireless Networks Jeff Foerster, Intel	10:15 AM	TA2b-3	Covering Codes for Multilevel Flash Memories Kathryn Haymaker, Christine Kelley, University of Nebraska-Lincoln	11:05 AM
TA1b-2	Subcarrier Mapping Based on Slice Visibility for Video Transmission over OFDM Channels Laura Toni, Pamela C. Cosman, Laurence B. Milste University of California, San Diego	3	TA2b-4	and TLC Flash Memories Paul H. Siegel, Brian K. Butler, Scott Kayser, Eitan Yaakobi, Xiaojie (Eric) Zhang, University of Californ	11:30 AM
TA1b-3	An Online Learning Framework for Perceptually Optimized Adaptive Video Transmission Amin Abdel Khalek, University of Texas at Austin; Constantine Caramanis, Robert W. Heath, Jr., The University of Texas at Austin	11:05 AM		TA3a Multiuser and Massive MIMO (invited) aar Jindal, Broadcom	1
TA1b-4	Device-to-Device Communications for Wireless Video Delivery Negin Golrezaei, Alexandros Dimakis, Andreas F. M. University of Southern California	11:30 AM Molisch,	TA3a-1	Downlink Outage Probability in MIMO HetNets Harpreet S. Dhillon, University of Texas at Austin; M Kountouris, École supérieure d'électricité; Jeff Andre University of Texas at Austin	
	TA2a Game Theory in Communicat (invited)		TA3a-2	Coverage and Capacity in mmWave MIMO Systems Salam Akoum, Omar El Ayach, Robert W. Heath,	8:40 AM
Co-Chairs <i>University</i>	s: Marco Luise, University of Pisa and Giacomo of Pisa	Bacci,	TA3a-3	University of Texas at Austin A Millimeter-Wave Massive MIMO System	9:05 AM
TA2a-1	Distributed Spectrum Sharing Policies for Selfish Users with Imperfect Monitoring Abili Yuanzhang Xiao, Mihaela van der Schaar, Universit		17154-5	for Next Generation Mobile Broadband Zhouyue Pi, Jianzhong Zhang, Farooq Khan, Samsur Corp.	
TA2a-2	California, Los Angeles Energy Efficiency Games in Cloud Computing for Wireless Networks Tao Lin, Tansu Alpcan, Arun Vishwanath, Universit Melbourne	8:40 AM	TA3a-4	Towards Improving LTE SU/MU-MIMO Performance: Issues in Channel Estimation, Interpolation and Feedback Ozgun Y. Bursalioglu, Sean A. Ramprashad, Haralab Papadopoulos, NTT DoCoMo Labs	9:30 AM
TA2a-3	Mean Field Energy Games in Wireless Networks François Mériaux, Laboratoire des Signaux et Syste (L2S); Vineeth S Varma, Orange Labs; Samson Laso Laboratoire des Signaux et Systèmes (L2S)				

Session TA3b Compressive Estimation

Chair: Wee Peng Tay, Nanyang Technological University, Singapore

- TA3b-1 Compressive Estimation in AWGN: General 10:15 AM
 Observations and a Case Study
 Dinesh Ramasamy, Sriram Venkateswaran, Upamanyu
 Madhow, University of California, Santa Barbara
- TA3b-2 On Application of LASSO for Sparse Support 10:40 AM Recovery with Imperfect Correlation Awareness

 Piya Pal, P. P. Vaidyanathan, California Institute of Technology
- TA3b-3 Compressive Multiplexers for Correlated Signals

 Ali Ahmed, Justin Romberg, Georgia Institute of Technology
- TA3b-4 Optimal Acquisition Policy for Compressed 11:30 AM Measurements with Limited Observations
 Sourabh Bhattacharya, Ashutosh Nayyar, Tamer Basar,
 University of Illinois, Urbana-Champaign

Session TA4a Social Networks (invited)

Chair: Patrick Wolfe, Harvard University

- TA4a-1 Hub Discovery in Partial Correlation 8:15 AM
 Graphical Models
 Al Hero, University of Michigan
- TA4a-2 Geometric Network Analysis Tools
 Michael Mahoney, Stanford University

 8:40 AM
- TA4a-3 Learning over Social Networks via Diffusion 9:05 AM Adaptation
 Xiaochuan Zhao, Ali Sayed, University of California, Los
 Angeles
- TA4a-4 Large Networks of Dynamic Agents: 9:30 AM
 Consensus under Adversarial Disturbances
 Dario Bauso, Tamer Basar, University of Illinois, UrbanaChampaign

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

 John Baras, University of Maryland

 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 8:15 AM Stereoscopic Images by Modeling Binocular Rivalry

 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
- TA5a-2 Visual Quality in Stereoscopic 3DTV 8:40 AM
 Ramanathan Palaniappan, Nikil Jayant, Georgia Institute
 of Technology; Pravin Mane, VOLink
- TA5a-3 Depth Map Estimation in DIBR Stereoscopic 9:05 AM 3D Videos Using a Combination of Monocular Cues Mohammed Aabed, Dogancan Temel, Ghassan AlRegib, Georgia Institute of Technology
- TA5a-4 Perceptual Depth Indicator for S-3D Content 9:30 AM
 Based on Binocular and Monocular cues
 Pierre Lebreton, Alexander Raake, Telekom Innovation
 Laboratories; Marcus Barkowsky, Patrick Le Callet,
 LUNAM Université, Université de Nantes

Session TA5b Computer Arithmetic Accelerators for Signal Processing

Chair: Roger Woods, Queen's University Belfast

- TA5b-1 Imprecise Arithmetic for Low Power Image 10:15 AM Processing

 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
- TA5b-2 Linearization Using Efficient Complex
 Polynomial Evaluations
 Pouya Dormiani, Milos Ercegovac, University of
 California, Los Angeles
- TA5b-3 FPGA-Accelerated Simulation of 11:05 AM
 Truncated-Matrix Multipliers
 George Walters, Penn State Erie, The Behrend College
- TA5b-4 A Low-Power Dual-Path Floating-Point 11:30 AM Fused Add-Subtract Unit

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

 University of Texas at Austin

Session TA6a Low Power I (invited)

Chair: James Stine, Oklahoma State University

- TA6a-1 Breaking the 3-D IC Power Delivery Wall 8:15 AM Mircea Stan, Kaushik Mazumdar, University of Virginia
- TA6a-2 A Review of QCA Adders and Metrics 8:40 AM

 Weigiang Liu, Maire O'Neill, Queen's University of

 Belfast; Earl Swartzlander, University of Texas at Austin

TA6a-3	Circuits for Ultra-low Power Millimeter-Scale Sensor Nodes: Progress, Opportunities, and Challenges	9:05 AM
	Yoonmyung Lee, Dennis Sylvester, David Blaauw, University of Michigan	
TA6a-4	Distributed Power Delivery for Energy Efficient and Low Power Systems	9:30 AM
	Selcuk Kose, University of South Florida; Eby Friedr University of Rochester	nan,
Session T	A6b Low Power II (invited)	
Chair: Jame	s Stine, Oklahoma State University	
TA6b-1	The Energy-Efficiency of Asynchronous Architectures Rajit Manohar, Cornell University	10:15 AM
TA6b-2		10:40 AM
	Stine, Oklahoma State University	
TA6b-3	Yield-Driven Minimum Energy CMOS Circuit Design Max Korbel, Dylan Stow, Chris Ferguson, David Har	11:05 AM
	Harvey Mudd College	,
TA6b-4	Power Efficient Design of Parallel/Serial FIR Filters in RNS Massimo Petricca, Pietro Albicocco, Gian Carlo Cardarilli, University of Rome Tor Vergata; Alberto Nannarelli, Technical University of Denmark; Marco University of Rome Tor Vergata	11:30 AM Re,
Session T	A7a Biological Networks and Mach	ine
	Learning (partly invited)	
Chair: Olgic	ca Milenkovic, University of Illinois, Urbana-Ch	ampaign
TA7a-1	Wavelet Packets Based Clustering for the Study of Functional Connectivity in the Rat Bra Alessio Medda, Georgia Institute of Technology; Shel Keilholz, Emory University School of Medicine	
TA7a-2	Reconstructing a Sparse Matrix Using Row and Column Pooling Or Zuk, Broad Institute of MIT and Harvard	8:40 AM
TA7a-3	Alignment of Multiple Biological Networks Based on Semi-Markov Random Walk Scores Sayed Mohammad Ebrahim Sahraeian, Byung-Jun Yo Texas A&M University	9:05 AM
TA7a-4	Reducing the Number of Features for Seizure Prediction of Spectral Power in Intracranial EE Yun Park, Brown University; Theoden Netoff, Keshab Parhi, University of Minnesota	

Session TA7b Sequence and Genome Analysis (partly invited)

Chair: Sharon Aviran, University of California, Berkeley

- TA7b-1 Sparse Inference of Regulatory Networks 10:15 AM
 Using Information-Theoretic Methods
 Mo Deng, Amin Emad, Olgica Milenkovic, University of
 Illinois, Urbana-Champaign
- TA7b-2 Structural Stabilization of RNA-Protein 10:40 AM Binding Sites through High Linkage SNPs

 Matthew Halvorsen, Joshua S. Martin, Wes Sanders,

 Justin Ritz, Alain Laederach, University of North
 Carolina, Chapel Hill
- TA7b-3 Detection of Antipodal Persistence in Large 11:05 AM Scale Differential Gene Expression Experiments Alfred Hero, Robert Brown, Hamed Firouzi, University of Michigan, Ann Arbor
- TA7b-4 Efficient Genotyping of Individuals Using 11:30 AM
 Overlapping Pool Sequencing and Imputation
 Farhad Hormozdiari, Zhanyong Wang, Wen-Yun Yang,
 Eleazar Eskin, University of California, Los Angeles

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

 Zhenhua Yu, Xiaoli Ma, G. Tong Zhou, Georgia Institute of Technology
- TA8a1-2 On the Applicability of Source Localization Techniques to Passive Multistatic Radar

 Daniel Hack, Lee Patton, Matrix Research, Inc.; Braham

 Himed, Michael Saville, Air Force Research Laboratory
- TA8a1-3 Sparse Frequency Diverse MIMO Radar Imaging Changchang Liu, Weidong Chen, University of Science and Technology of China
- TA8a1-4 EEG Source Localization Using Beamforming in Energy-Constrained Regions

 D. Gutiérrez, C. C. Zaragoza-Martínez, Center of Research and Advanced Studies
- TA8a1-5 Hybrid Cramer-Rao Lower Bound for Sniper Localization via a Helicopter-Based Acoustic Array Lou Fertig, Georgia Tech Research Institute
- TA8a1-6 A ML Localizer of Multiple Radar Targets
 Francesco Bandiera, Michele Mancino, Giuseppe Ricci,
 University of Salento; Danilo Orlando, ELETTRONICA
 S.p.A.
- TA8a1-7 Recursive Updating Algorithm for Robust Capon Beamforming with Steering Vector Mismatches Evgeny Mavrychev, Nizhniy Novgorod State Technical University

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, Beamspace 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

Session TA8a2 Signal Processing and Adaptive Systems II

Mohammad Pourhomayoun, Mark Fowler, Binghamton

Chair: Nascimento Vitor, Univ. of Sao Paulo

Complex Domain

Technology

University

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

Robert Dallinger, Markus Rupp, Vienna University of

TA8a2-4 Efficient FFT Based Comb Filtering without Doing the 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,

TA8a2-6 Discriminative Dictionary Learning via Mutual Exclusion Raghu Raj, U.S. Naval Research Laboratory

University of California, Santa Barbara

- 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 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 Ûrriza, 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

 Pouva Tehrani, Qing Zhao, University of California, Davis
- TA8b1-5 Spectrum Sensing Scheduling in a Cost-based Framework

 Aditya Kelkar, Oi 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 Varshnev. 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 Hierarchial 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

Chair. Jorn	w. Janneck, Luna 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 T	P1a Network Optimization (invited)
Chair: Atille	a 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-LTCI; 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, Soummya 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
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 Self-Localization and Target Tracking Using Be Propagation and Likelihood Consensus	2:45 PM lief	Session		Underwater Communications (invited)		
	Florian Meyer, Erwin Riegler, Ondrej Hlinka, Franz Hlawatsch, Vienna University of Technology		Chair: Gee	ert Leus, T	TU Delft		
	TP2b Cooperative Adaptation and L (invited)	earning	TP3b-1	Fraction	ntially Coherent OFDM with nal FFT Demodulation M Aval, Millica Stojanovic, Northeastern ity	3:30 PM	
University	s: Danilo Mandic, Imperial College and Ali Sayed, y of California, Los Angeles		TP3b-2	Channe Transm	el Estimation for Multi-layer Block hissions over Underwater Acoustic Chan		
TP2b-1	Mean-Square Analysis of Continuous-Time Distributed Estimation Strategies Vitor Nascimento, University of São Paulo; Ali Sayed University of California, Los Angeles	3:30 PM		Srinivas Yerramalli, University of Southe Zijian Tang, Netherlands Organization f Scientific Research; Urbashi Mitra, Univ California		for Applied	
TP2b-2	Extrinsic Gossip and Reducing Self-reinforcement in Distributed Consensus Andrew Bean, Angelia Nedich, Andrew Singer, Univer of Illinois, Urbana-Champaign	3:55 PM	Distributed Antenn Channels Zhaohui Wang, Sheng		Wang, Shengli Zhou, University of Connects	icut;	
TP2b-3	Non-linear Least Squares Estimation via Network Diffusion Simon Li, Anna Scaglione, University of California, L	4:20 PM		Naval U of Conn		ersity	
TP2b-4	Fast Cooperative Distributed Learning Dusan Jakovetic, Jose M F. Moura, Joao Xavier, Carr	4:45 PM	TP3b-4		vater Channel Aware Routing Jasari, Matteo Lazzarin, Michele Zorzi, Univ Ja	4:45 PM ersity	
TP2b-5	Mellon University Exploiting the Noncircularity of Complex Cooperative Learning Systems Dahir Dini, Danilo Mandic, Imperial College London	5:10 PM	TP3b-5	Informa Atulya Y Woods H	daptive Turbo Equalization- Using Soft ation in Adaptation Yellepeddi, Massachusetts Institute of Technologo Oceanographic Institute; James Preisig	logy/	
Session	TP3a Information Theoretic Signal		Session		Hole Oceanographic Institute Decoding and Detection		
Ca Chain	Processing	1			amare, The University of York		
	s: P. P. Vaidyanathan, California Institute of Techi Pal, California Institute of Technology	iology	TP4a-1	_	omplexity and Approximative Sphere	1:30 PM	
TP3a-1	The Gaussian CEO Problem for a Scalar Source with Memory: A Necessary Condition <i>Jie Chen, Feng Jiang, Arnold Swindlehurst, Universit</i>	1:30 PM	11 14 1	Decodi	ng of Sparse Signals in Knoop, Till Wiegand, Steffen Paul, Univer.		
TP3a-2	California, Irvine Empirical Rate-Distortion Study of Compressive Sensing-based Joint Source-Change	1:55 PM	TP4a-2	Nonvol Frederic	ic Threshold Schemes for Multi-Level latile Memories Sala, Ryan Gabrys, Lara Dolecek, Universi sia, Los Angeles		
	Coding Muriel L. Rambeloarison, Soheil Feizi, Georgios Angelopoulos, Muriel Medard, Massachusetts Institut Technology	e of	TP4a-3	Iterative System Algorit	e Detection and Decoding for MIMO s with Knowledge-Aided Belief Propag hms		
TP3a-3	Greedy Adaptive Measurements with Signal and Measurement Noise	2:20 PM		Jingjing York	Liu, Peng Li, Rodrigo de Lamare, Universit	y of	
TP3a-4	Entao Liu, Edwin Chong, Louis Scharf, Colorado Sta University Role of Bandwidth in the Quality of Inversion		TP4a-4	Practica	zation, Absorbing Regions and al Message Passing Decoders Amiri, University of California, Los Angeles,	2:45 PM	
11 Ja-4	Role of Danuwight in the Quality of Inversion	4.4J 1 IVI		CO.	a .a w b		

of Linear Multirate Systems with Noise

Technology

P. P. Vaidyanathan, Piya Pal, California Institute of

Shayan Garani Srinivasa, Western Digital Corporation;

Lara Dolecek, University of California, Los Angeles

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 3:30 PM Networks Na Li, Lingwen Gan, Steven Low, California Institute of Technology; Lijun Chen, University of Colorado at
TP4b-2	Boulder Competitive Privacy in the Smart Grid 3:55 PM Lalitha Sankar, Princeton University; Soummya Kar, Carnegie Mellon University; H. Vincent Poor, Princeton University
TP4b-3	Secure Network and Information 4:20 PM Architectures for Smart Grid Data Analysis and

Control

Marina Thottan, Young Jin Kim, Gary Atkinson, Bell
Laboratories, Alcatel-Lucent

TP4b-4

The Impact of Volatile Generation/Load

TP4b-4 The Impact of Volatile Generation/Load 4:45 PM
Profile in Smart Grid on the Grid Vulnerability to
Cascading Overload Failures
Zhifang Wang, Anna Scaglione, University of California,
Davis; Robert J. Thomas, Cornell University

TP4b-5 Power Resource Allocation in a Network of 5:10 PM Fast Charging Stations George Michailidis, Michael Devetsikiotis, Safak Bayram, University of Michigan

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 David Romero, Nicholas Chang, MIT Lincoln Labora	1:55 PM
TP5a-3	A GPU Implementation of Belief Propagation Decoder for Polar Codes Bharath Kumar Reddy, Nitin Chandrachoodan, India Institute of Technology, Madras	2:20 PM
TP5a-4	High Performance Efficient Parallel	2:45 PM

Nonbinary LDPC Decoding on GPU

Cavallaro, Rice University

Guohui Wang, Hao Shen, Bei Yin, Yang Sun, Joseph R.

Session TP5b Interference Alignment (invited)

Chair: Tharm Ratnarajah, Queen's University Belfast

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

Session TP6a Wireless Full Duplex

Multi-Point Systems

Chair: Ashutosh Sabharwal, Rice University

University Belfast

TP6a-1	Decode-and-Cancel for Interference Cancellation in Full-duplex Networks Jingwen Bai, Ashutosh Sabharwal, Rice University	1:30 PM
TP6a-2	Full-Duplex MIMO Relaying: Achievable Rates under Limited Dynamic Range	1:55 PM

Seyed Morteza Razavi, Tharm Ratnarajah, Queen's

Rates under Limited Dynamic Range
Brian Day, Ohio State University; Daniel Bliss, Adam
Margetts, MIT Lincoln Laboratory; Philip Schniter, Ohio
State University

TP6a-3 Full Duplex Wireless Communications with 2:20 PM
Partial Interference Cancellation
Jianshu Zhang, Seyed Omid Taghizadeh Motlagh, Ilmenau
University of Technology; Jian Luo, Fraunhofer HeinrichHertz-Institute; Martin Haardt, Ilmenau University of
Technology

TP6a-4 Wideband Digital Cancellation for 2:45 PM Full-Duplex Communications

Mohammad Ali Khojastepour, Sampath Rangarajan, NEC Laboratories America, Inc.

Session TP6b Biological Image Analysis

Chair: Scott T. Acton, University of Virginia

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

TP6b-2	Robust Biological Image Sequence Analysis Using Graph Based Approaches B.S. Manjunath, Diana Delibaltov, Karthikeyen Shan. Vadivel, Vignesh Jagadeesh, University of California, Santa Barbara		TP7b-3	Sparsity-Constrained Stranded Gaussian 4:20 PM Mixture Hidden Markov Models for Automatic Speech Recognition Yong Zhao, Biing-Hwang (Fred) Juang, Georgia Institute of Technology			
TP6b-3	A Linear, Transportation-based, Embedding Method for Analyzing Biomedical Images G.K. Rohde, W. Wang, S. Basu, D. Slepcev, Carnegie Mellon University	4:20 PM	TP7b-4	Visual Speech Recognition Using 4:45 PM Stereo-Vision Image Chao Sui, Mohammed Bennamoun, Roberto Togneri, Serajul Haque, Damien Pontifex, University of Western			
TP6b-4	An Information Theoretic Framework for MRI Preprocessing, Multiclass Feature Selection and Segmentation of PF Tumors Shaheen Ahmed, Emory U.; K.M. Iftekharuddin, Old Dominion University; E.O. George, University of Medical Section 1981		TP7b-5	Australia On the Integration of Time-Frequency Masking Source Separation and Missing Data Speech Recognition in Underdetermined Environments 5:10 PM			
TP6b-5	The Effect of Image Registration on the Localization of Single Molecules in Microscopy	5:10 PM y		Ingrid Jafari, Serajul Haque, Roberto Togneri, Sven Nordholm, University of Western Australia			
	Experiments Raimund Ober, Edward Cohen, University of Texas at	t		TP8a1 Relay Networks			
G • n	Dallas	D •	Chair: Mai	ite Brandt-Pearce, University of Virginia			
	TP7a MIMO Radar and Waveform	Design		1:30 PM - 3:10 PM			
	ius Pesavento, TU Darmstadt		TP8a1-1	On OFDMA Resource Allocation for Delay Constrained			
TP7a-1	Transmit Beamspace Design for Direction Finding in Colocated MIMO Radar with Arbitra Receive Array and Even Number of Waveforms Arash Khabbazibasmenj, Sergiy Vorobyov, Aboulnasr	3		HARQ Systems Sébastien Marcille, Thales Communications and Security; Philippe Ciblat, Télécom ParisTech; Christophe Le Martret, Thales Communications and Security			
	Hassanien, Matthew Morency, University of Alberta	TP8a1-2	Cooperative AF MIMO Wireless Relay Networks under Relay Power Constraint				
TP7a-2	Jammer Detection and Estimation with MIMO Radar Xiufeng Song, Peter Willett, Shengli Zhou, University Connecticut	1:55 PM of		Ketay Fower Constraint Kanghee Lee, Hyuck Kwon, Hyunggi Kim, Wichita State University; Hyuncheol Park, Yong Lee, Korea Advanced Institute of Science and Technogy			
TP7a-3	Non-linear Processing for Multicarrier MIMO Radar for Improved Target Resolution Mir H. Mahmood, Mark R. Bell, Purdue University	2:20 PM	TP8a1-3	Average Sum-BER Analysis of AF Two-way Relay Networks with Direct Links Cihan Tepedelenlioglu, Hyunjun Kim, Arizona State University			
TP7a-4	Generating Correlated QPSK Waveforms by Exploiting Real Gaussian Random Variables Jardak Seifallah Jardak, Tunisia Polytechnic School (TPS)-University of Carthage; Sajid Ahmed, Slim Alo King Abdullah University of Science and Technology	2:45 PM	TP8a1-4	Performance Analysis of Amplify-and-Forward Relaying Using Fractional Calculus Mehdi Mortazawi Molu, Norbert Goertz, Vienna University of Technology			
Section 7	ΓΡ7b Speech Processing and Speech		TP8a1-5	Delay-Optimal Multi-flow Buffered Decode-and-			
Session	Recognition (invited)			Forward Relay Communications with Limited Renewable Energy Storage			
Chair: Toki	unbo Ogunfunmi, Santa Clara University			Fan Zhang, Vincent Lau, Hong Kong University of Science and Technology			
TP7b-1	Reproducing Kernel-based Methods for Extracting and Identifying Noise-Robust Speec Features Shantanu Chakrabartty, Michigan State University	3:30 PM h	TP8a1-6	Relay Selection in Amplify-and-Forward Relay Networks with Frequency Selective Fading Qingxiong Deng, Andrew G. Klein, Worcester Polytechnic Institute			
TP7b-2	Joint Tracking of Clean Speech and Noise Using HMMS and Particle Filters for Robust Speech Recognition Aleem Mushtaq, Chin-Hui Lee, Georgia Institute of Technology	3:55 PM	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,
 Oueen'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
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- 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

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- 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
- 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	ТР861-17	Camera Placement for Handheld 3D Video Communications Stephen Mangiat, Jerry Gibson, University of California, Santa Barbara		
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TP8b1-4	Electrical and Computer Engineering Regional Features with Adaptable Global Mappings for	Session 7	TP8b2 Biomedical Signal and Image		
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	Katia Estabridis, Naval Air Weapons Center	Chair: Kes	hab K. Parhi, University of Minnesota		
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	Completion Nafise Barzigar, Aminmohammad Roozgard, Samuel Cheng, Pramode Verma, University of Oklahoma	TP8b2-2	Performance Analysis of a 2-D EEG Compression Algorithm Using an Automatic Seizure Detection Syster Hoda Daou, Fabrice Labeau, McGill University	n	
TP8b1-7	Speech Enhancement of Color Noise Using Empirical Mode Decomposition Min-Sung Koh, Esteban Rodriguez-Marek, Eastern Washington University	TP8b2-3	A Novel Method for Tumor Localization and Tracking Radiation Therapy Mohammad Pourhomayoun, Mark Fowler, Zhanpeng Jin, Binghamton University		
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TP8b1-9	Bovik, University of Texas at Austin Temporal Dispersal of Multiple Representations for Error-Resilient Video Streaming Sourabh Khire, Georgia Institute of Technology; Arturo Rodriguez, Cisco Systems; Nikil Jayant, Georgia Institute	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		
TP8b1-10	of Technology A New Map-based Approach to Video De-interlacing Using Forward-Backward Algorithm Farhang Vedadi, Shahram Shirani, McMaster 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		
TP8b1-11	A Novel De-interlacing Method Based on Locally- Adaptive Nonlocal-Means				
	Roozbeh Dehghannasiri, Shahram Shirani, McMaster	Session WA1a Feedback and Cooperation (invited)			
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TP8b1-13	Making Image Quality Assessment Robust Anish Mittal, Anush Moorthy, Alan Bovik, University of Texas at Austin		Enrico Paolini, University of Bologna; Gianluigi Liva, German Aerospace Center (DLR); Marco Chiani, University of Bologna		
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TP8b1-16 A Generalized Likelihood Ratio Test for SAR CCD

Michael Newey, Gerald Benitz, Stephen Kogon, Massachusetts Institute of Techology Lincoln Laboratory

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	Shang Li, Matthew McKay, Hong Kong University of Science and Technology; Yang Chen, University of M		WA2b-3	Approximating the Capacity of Wireless Multiple Unicast Networks by Discrete
	WA1b Security			Superposition Model Nicolas Schrammar, Mikael Skoglund, KTH Royal
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WA1b-2	Deploying Multi-antenna Energy-Harvesting	10:40 AM	Session	WA3a Adaptive Signal Processing
	Cooperative Jammers in the MIMO Wiretap Channel		Chair: Cea	dric Richard, Univ. de Nice Sophia-Antipolis
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WA1b-3	Unicasting on the S-Graph Satyanaranaya Vuppala, Giuseppe Abreu, Jacobs University Bremen	11:05 AM		Errors Saeed Ghazanfari-Rad, Fabrice Labeau, McGill University
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WA2a-1	Distributed and Autonomous Resource Allocation for Femto-Cellular Networks Harald Burchardt, University of Edinburgh; Zubin Bharucha, DoCoMo Euro-Labs; Harald Haas, Univ	8:15 AM versity	WA3a-4	Complex Colored Water-Filling Algorithm for 9:30 AM Gain Allocation in Proportionate Adaptive Filtering Kevin Wagner, Naval Research Laboratory; Milos Doroslovacki, George Washington University
WA2a-2	of Edinburgh Universal Computation with Low-Complexity	8·40 AM	Session	WA3b Compressive Signal Processing
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WA2a-3	A Unified Analysis of CDF-based Distributed Scheduling in a Heterogeneous Multicell Yichao Huang, Bhaskar D. Rao, University of Califo			Compressed Sensing with Permutations Hao Fang, Sergiy A. Vorobyov, Hai Jiang, Omid Taheri, University of Alberta
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WA2a-4	Unsupervised Algorithms for Distributed Estimation over Adaptive Networks	9:30 AM		Duration Blaise Kévin Guépié, Lionel Fillatre, Igor Nikiforov, Université de Technologie de Troyes
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WA2b-1	Joint Design of Multi-resolution Codes and	10:15 AM		Spectrum Using the Random Demodulator Andrew Harms, Princeton University; Waheed Bajwa,

Intra/Inter-layer Network Coding

Tong Wang, Muriel Medard, Lizhong Zheng, Massachusetts Institute of Technology

Rutgers University; Robert Calderbank, Duke University

Session WA4a Interference and Cognition

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

- WA4a-1 Interference Alignment for Channel-Adaptive 8:15 AM
 Waveform Modulation
 Urs Niesen, Thomas Marzetta, Bell Laboratories, AlcatelLucent
- WA4a-2 On the Discrete Superposition Model of Partially Cognitive Interference Channels
 Nicolas Schrammar, Chao Wang, Lars K. Rasmussen,
 Mikael Skoglund, KTH Royal Institute of Technology
- WA4a-3 Interference Management for Cognitive Radio 9:05 AM Systems Exploiting Primary IR-HARQ: a Constrained Markov Decision Process approach Romain Tajan, University of Cergy Pontoise; Charly Poulliat, University of Toulouse; Inbar Fijalkow, University of Cergy Pontoise
- WA4a-4 Energy-Aware Cooperative Quickest 9:30 AM
 Detection for Cognitive Radio Networks
 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 10:15 AM Processing Delay in Full-Duplex OFDM Repeaters

 Taneli Rithonen, Pramod Mathecken, Risto Wichman,

 Aalto University
- WA4b-2 Weighted CDF-based Scheduling for an 10:40 AM OFDMA Relay Downlink with Partial Feedback

 Anh Nguyen, Yichao Huang, Bhaskar Rao, University of California, San Diego
- WA4b-3 Transmitter-Side Timing Adjustment to 11:05 AM
 Mitigate Interference between Multiple Nodes for
 OFDMA Mesh Network
 Sungeun Lee, Xiaoli Ma, Georgia Institute of Technology
- WA4b-4 Detection of Code Spread OFDM Based on 0-1 Integer Quadratic Programming

 Ali Elgharini, Purdue university

Session WA5a Applications of Video Processing

Chair: Mashhour Solh, Texas Instruments Inc.

- WA5a-1 Automatic Track Tracing in SAR CCD 8:15 AM Images Using Search Cues Miriam Cha, Rhonda Phillips, MIT Lincoln Laboratory
- WA5a-2 H.264/AVC Data Hiding Based on Intra 8:40 AM
 Prediction Modes for Real Time Applications
 Samira Bouchama, Research Center on Scientific
 and Technical Information; Latifa Hamami, National
 Polytechnic School of Algiers; Hassina Aliane, Research
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WA5a-3	A Computer Vision System for Monitoring 9:05 AM
	Vessel Motion in Conjunction with Vessel Wake
	Measurements
	Sam Tan, Jenelle Armstrong Piepmeier, David Kriebel,
	United States Naval Academy

WA5a-4 Acoustic Monitoring Techniques for Avian 9:30 AM
Detection and Classification
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State University; Mohsin Jamali, University of Toledo;
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Session WA5b Image and Video Classification

Chair: Dihong Tian, Cisco Systems, Inc.

- WA5b-1 A Joint Sparsity Model for Video Anomaly 10:15 AM
 Detection

 Xuan Mo, Vishal Monga, Pennsylvania State University;
 Raja Bala, Zhigang Fan, Xerox Research Center Webster
- WA5b-2 Learning Dictionaries with Graph Embedding 10:40 AM Constraints for Image Classification

 Karthikeyan Natesan Ramamurthy, Jayaraman J.

 Thiagarajan, Andreas Spanias, Arizona State University
- WA5b-3 Training Image Classifiers with Similarity
 Metrics, Linear Programming, and Minimal
 Supervision
 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 11:30 AM Image Classification

 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 8:15 AM
 Channel
 Sung Lock Seo, Jung Hoon Lee, Wan Choi, Korea
 Advanced Institute of Science and Technology (KAIST)
- WA6a-2 Tomlinson-Harashima Precoding for 8:40 AM
 Multiuser MIMO Systems with Quantized CSI
 Feedback
 Liang Sun, Ming Lei, NEC Labs China
- WA6a-3 Sum Rate Analysis and Quantizer Design for 9:05 AM a Quantized Heterogeneous Feedback MIMO OFDMA Downlink

 Yichao Huang, Bhaskar D. Rao, University of California,
 San Diego
- WA6a-4 CSI Feedback Delay and Degrees of Freedom 9:30 AM Gain Trade-Off for the MISO Interference Channel 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 10:15 AM Multi-user Downlink System
 Qingjiang Shi, Alcatel-Lucent Shanghai Bell Company;
 Meisam Razaviyayn, Mingyi Hong, Zhi-Quan Luo,
 University of Minnesota
- WA6b-2 Pragmatic Multi-cell MIMO Beamforming 10:40 AM with Decentralized Coordination

 Harri Pennanen, Antti Tölli, Matti Latva-aho, University of Oulu
- WA6b-3 A Total Power Minimization Approach to 11:05 AM Relay Selection for Two-Way Relay Networks Saurabh Talwar, Shahram ShahbazPanahi, University of Ontario Institute of Technology
- WA6b-4 Joint Network-Channel-Coded Multi-Way 11:30 AM Relaying 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 8:15 AM
 a Pipe using Guided Acoustic Waves
 Nicholas O'Donoughue, Joel Harley, Chang Liu, Jose'
 M.F. Moura, Irving Oppenheim, Carnegie Mellon
 University
- WA7a-2 Field Testing of Indirect Displacement 8:40 AM
 Estimation Using Accelerometers
 Viswanadh Kandula, Linda DeBrunner, Victor DeBrunner,
 Michelle Rambo-Roddenberry, Florida State University
- WA7a-3 Wireless Sensor Network Discovery Using
 Large Aperture Array Signal Processing
 Marc Willerton, Imperial College London; Mahesh
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 Spanias, Trevor Thornton, Arizona State University;
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- WA7a-4 Clipping Effect on Radiation Pattern in 9:30 AM
 Downtilt Beamforming
 Qingsong Wen, Sungeun Lee, Xiaoli Ma, Georgia Institute
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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
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 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

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ardarilli, Gian Carlo		Cosman, Pamela C		Eksin, Ceyhun		Garcia-Vega, Carlos	
aromi, Raied		Cousins, Dave		El Ayach, Omar		Ge, Hongya	
asari, Paolo		Cui, Ying		El Korso, Mohammed Nabi		George, E.O	
atipovic, Josko		Dallinger, Robert		Elbatt, Tamer		George, Geordie	
avallaro, Joseph R		Daniels, Michelle		Eldar, Yonina C		Gerig, Guido	MP7a-1
avallaro, Joseph R		Daou, Hoda	TP8b2-2	Elgharini, Ali	WA4b-4	Gerslauer, Andreas	MA6b-2
avallaro, Joseph R	TP5a-4	Dasarathan, Sivaraman	TP2a-2	El-Keyi, Amr	TA8b1-11	Gerstoft, Peter	MP2a-2
edersjö, Gustav	TP8a3-8	Davenport, Mark	MP1a-3	Elliott, Robert	TA8b2-7	Gerstoft, Peter	MP2a-3
enk Yetis, Mustafa		Day, Brian	TP6a-2	Elsayed, Shehab Y	TP8a3-2	Gesbert, David	TP5b-2
evher, Volkan		de Lamare, Rodrigo		Eltawil, Ahmed M		Gettings, Karen	
na, Miriam		de Lamare, Rodrigo C		Emad, Amin		Ghauri, Irfan	
naaban, Anas		De Lathauwer, Lieven		Ercegovac, Milos		Ghazanfari-Rad, Saeed	
nakrabarttv. Shantanu.		Debbah, Mérouane		Ercegovac, Milos D		Gholamipour, AmirHossein	
hamon, Luiz		Debbah, Mérouane		Ericson, Mike		Ghuman, Kirandeep	
		DeBrunner, Linda					
nandler, Damon				Ertin, Emre		Gibson, Jerry	
nandrachoodan, Nitin		DeBrunner, Linda		Eryilmaz, Atilla		Gibson, Jerry	
nang, Chih-Hua		DeBrunner, Linda		Eskin, Eleazar		Gibson, Jerry	
hang, Dan		DeBrunner, Victor		Estabridis, Katia		Goertz, Norbert	
nang, Jeannette		DeBrunner, Victor		Etzlinger, Bernhard		Gogineni, Sandeep	
hang, Nicholas		DeBrunner, Victor		Eweda, Eweda		Golrezaei, Negin	
hang, Nicholas	TP5a-2	DeBrunner, Victor		Fahmy, Hossam A. H		Gonzalez-Navarro, Sonia	MP6a-2
hen, Chen	MP5b-2	Dehghannasiri, Roozbeh	TP8b1-11	Faiz, Mohammed	TA8a2-10	Görtz, Norbert	MP2a-2
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Deng, Mo	
Deng, Qingxiong	
Denloye-Ito, Emmanuel	
Deppmann, Christopher	
Deriche, Rachid	
Desai, Sachi	
Devetsikiotis, Michael	TP4b-5
Dhillon, Harpreet S	TA3a-1
Di Nunzio, Luca	
Di Renzo, Marco	
Diao, Qiuju	TA2b-2
Dick, Chris	
Dimakis, Alexandros	
Ding, Li	
Dini, Dahir	
Djuric, Petar M	
Djuric, Petar M	
Dolecek, Lara	
Dolecek, Lara	
Dong, Min	
Dormiani, Pouya	TA5b-2
Doroslovacki, Milos	
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Edfors, Ove	
Eker, Johan	TA8b3-8
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Eksin, Ceyhun	
El Ayach, Omar	
El Korso, Mohammed Nabil	
Elbatt, Tamer	
Eldar, Yonina C	
Elgharini, Ali	
El-Keyi, Amr	
Elliott, Robert	
Elsayed, Shehab Y	IP8a3-2
Eltawil, Ahmed M	
Emad, Amin	
Ercegovac, Milos	
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Ericson, Mike	TA8b3-4
Ertin, Emre	
Eryilmaz, Atilla	TP1a-4
Eskin, Eleazar	
Estabridis, Katia	
Etzlinger, Bernhard	
Eweda, Eweda	
Fahmy, Hossam A. H	
Faiz, Mohammed	
Fakoorian. Ali	
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	Fang, Hao	WA3b-1
6	Fang, Jun	TP1b-5
1	Fannjiang, Albert	MP8a2-10
l	Fasarakis-Hilliard, Nikos	TA8a1-15
2	Fazzolari, Rocco	TP8a3-5
6	Feizi, Soheil	TP3a-2
5	Feng, Bo-Kai	TA8a1-13
	Ferguson, Chris	
5	Ferrari, Andre	MP8a2-16
3	Ferro, Humberto	MP8a2-9
2	Fertig, Lou	TA8a1-5
5	Figuera, Carlos	MA8b1-8
1	Fijalkow, Inbar	WA4a-3
2	Fillatre, Lionel	WA3b-2
5	Firouzi, Hamed	TA7h-3
5	Foerster, Jeff	TA1h-1
	Fort, Gersende	TP1h-1
2	Fowler, James	MP5h_2
1	Fowler, Mark	ΤΔ8-1-16
)	Fowler, Mark	
2	Fowler, Mark	TD0k2 2
1	Friedman, Eby	IFOUZ-J
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1 7	Frizado, Joseph	
	Gabrys, Ryan	
3	Gamage, Kanchana	
6	Gan, Lingwen	1P40-1
	Gansterer, Wilfried	IPZa-3
3	Gao, Wenzhong	IVIP8a2-5
3	Gao, Xiang	IVIP3a-3
1	Garani Srinivasa, Shayan	1P4a-4
2	Garcia-Vega, Carlos	MP6a-2
2	Ge, Hongya	MA8b2-12
1	George, E.O	TP6b-4
2	George, Geordie	IP5b-1
5	Gerig, Guido	MP/a-1
1	Gerslauer, Andreas	MA6b-2
1	Gerstoft, Peter	MP2a-2
7	Gerstoft, Peter	MP2a-3
2	Gesbert, David	TP5b-2
1	Gettings, Karen	TA8b3-4
1	Ghauri, Irfan	
2	Ghazanfari-Rad, Saeed	WA3a-1
1	Gholamipour, AmirHossein.	MP6b-4
1	Ghuman, Kirandeep	
3	Gibson, Jerry	
1	Gibson, Jerry	MA5b-3
1	Gibson, Jerry	
1	Goertz, Norbert	
)	Gogineni, Sandeep	
1	Golrezaei, Negin	
2	Gonzalez-Navarro, Sonia	
2	Görtz, Norbert	
)	Gorveski Peter	

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Grasing, David	MA8b2-7	Himed, Braham	TA8a1-2
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Green, Merlin		Hlinka, Ondrej	TP2a-4
Gruian, Flavius		Ho, Keang-Po	
Gruian, Flavius		Hofbauer, Christian	
Gründinger, Andreas		Hong, Mingyi	
Guan, Kyle		Hong, Mingyi	
Guan, Yong Liang		Hormozdiari, Farhad	
Guépié, Blaise Kévin		Horowitz, Larry L	
Guillen, Nancy		Hoydis, Jakob	
Gunawan, Erry		Hsieh, Hung-Yun	
Gunther, Jacob		Hsieh, Sung-Hsien	
Gunther, Jacob		Huang, Hsu-Chang	
Gunther, Jacob		Huang, Jing	
Gursoy, Mustafa Cenk		Huang, Yichao	
Gutiérrez, D	MP7b-3	Huang, Yichao	WA4b-2
Gutiérrez, D	TA8a1-4	Huang, Yichao	
Haardt, Martin	MP2b-2	Huang, Yih-Fang	TP8a2-10
Haardt, Martin	MP8a1-3	Huber, Johannes B	
Haardt, Martin		Huemer, Mario	
Haardt, Martin		Huemer, Mario	
laas, Harald		Huemer, Mario	
laas, Harald		Hugel, Max	
łack, Daniel		Hughes, Clay	
lague, David		Hwang, Suk-seung	
laimovich, Alexander M	MD222 15	Ibrahimi, Morteza	
		,	
Halvorsen, Matthew		Iftekharuddin, K.M.	
lamami, Latifa		Ihler, Alexander	
Han, Zhu		J. Thiagarajan, Jayaraman.	
Hancock, Timothy		Jafari, Ingrid	
Haneda, Eri		Jagadeesh, Vignesh	
Hanly, Stephen		Jakovetic, Dusan	
Hanly, Stephen		Jakubiec, Felicia	
Haque, Serajul	TP7b-5	Jakubowicz, Jérémie	TP1b-1
Haque, Serajul		Jamali, Mohsin	WA5a-4
Harley, Joel		Jamali, Mohsin M	TA8b3-5
Harms, Andrew		Janneck, Jörn	
Harris, David		Janneck, Jörn	
narris, fredric		Janneck, Jörn	
Haselmayr, Werner		Jayant, Nikil	
Hassanien, Aboulnasr		Jayant, Nikil	
Hayat, Majeed		Jayaraman, Dinesh	
Haymaker, Kathryn		Jenkins, William	
te, Ting		,	
		Jenn, David	
Heath, Robert		Jiang, Anxiao	
leath, Robert		Jiang, Feng	
Heath, Robert W		Jiang, Feng	
Heath, Jr., Robert W		Jiang, Hai	
Hegde, Rajesh		Jiang, Huaiguang	
Hellings, Christoph	TA8b2-8	Jiang, Yuebing	MP5a-1
Helwani, Karim	MA8b2-3	Jin, Pengchong	MP5b-4
Hero, Al		Jin, Zhanpeng	
		Jing, Yindi	

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Joham, Michael	
Johnson, Ben A.	
Johnston, Stephen	
Joshi, Satya	
Juang, Biing-Hwang (Fred)	TP7b-3
Jun, Kihwan	
Jung, Bang Chul	
Juntti, Markku	
Juntti, Markku	
Juntti, Markku	
Kadloor, Sachin	
Kahn, Joseph	
Kairouz, Peter	
Kakadiaris, Ioannis	
Kaliszan, Michal	WA1b-4
Kamath, Chandrika	TA8a2-2
Kandula, Viswanadh	WA7a-2
Kang, Inyup	MA8b1-7
Kang, Myung Gil	
Kao, David	
Kar, Soummya	
Kar, Soummya	
Karjalainen, Juha	MP8a1-5
Kaufman, Jonathan	TP8h2-1
Kayser, Scott	
Keilholz, Shella	
Kelkar, Aditya	
Kelley, Christine	
Kelly, Colm	
Ketonen, Johanna	
Ketonen, Johanna	
Khabbazibasmenj, Arash	
Khairy, Muhammad S	
Khalaj, Babak	
Khalil, Karim	
Khan, Faroog	
Khire, Sourabh	IP801-9
Khojastepour, Mohammad Al	
Kifer, Daniel	
Kim, Hanju	
Kim, Helen	
Kim, Hyunggi	IP8a1-2
Kim, Hyung-Sin	IP8a2-9
Kim, Hyunjun	
Kim, Joohwan	
Kim, Kyungtae	
Kim, Sungsoo	MA8b1-7
Kim, Young Jin	
Kim, Young-bin	
Kirsteins, Ivars	
Kiyavash, Negar	TA4b-3
Klein, Andrew G	TP8a1-6
Knight, Chad	MA8b2-10
Knoop, Benjamin	TP4a-1

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Ko, Bongjun	MP4b-4
Kobayashi, Mari	
Kogon, Stephen	TP8b1-15
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Koh, Min-Sung	TP8b1-7
Koivunen, Visa	MP4a-4
Koksal, C. Emre	
Koozakanani, Dara	
Korbel, Max	TA6b-3
Kose, Selcuk	
Kountouris, Marios	
Kovvali, Narayan	
Kriebel, David	
Krummenauer, Rafael	
Krzymien, Witold	
Kuchcinski, Krzysztof	
Kuhn, Marc	
Kurdahi, Fadi J	
Kurras, Martin	
Kvam, Jacques	IA8D1-7
Kwan Ng, Derrick Wing	
Kwon, Do-Kyoung	
Kwon, Hyuck	
Kyrillidis, Anastasios	
L. Zapata, Emilio	
Labeau, Fabrice	
Labeau, Fabrice	
Labeau, Fabrice	
Laederach, Alain	
Lai, Lifeng	
Lanterman, Aaron D	
Lasaulce, Samson	
Latva-aho, Matti	
Latva-aho, Matti	
Lau, Vincent	
Lau, Vincent	
Lazzarin, Matteo	
Le Callet, Patrick	
Le Martret, Christophe	
Le Martret, Christophe	
Lebreton, Pierre	
Lecomte, Timothee	MP7b-1
Lee, Chin-Hui	
Lee, Jung Hoon	
Lee, Junghoon	MP7a-4
Lee, Junghoon	
Lee, Junghsi	
Lee, Jungwon	
Lee, Kanghee	
Lee, Kang-won	
Lee, Namyoon	
Lee, Ruby B	
Lee, Sungeun	WA4h-3
Lee, Sungeun	
Loo, Jungeum	v v/\/\ a-4

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Lee, Yong-Hwan		Ma, Xiaoli	
Lee, Yoonmyung		Macagnano, Davide	
Lei, Ming		Madhow, Upamanyu	
Leinonen, Markus		Mahmood, Mir H	
Leus, Geert		Mahmood, Nurul Huda	
Leus, Geert		Mähönen, Petri	
Leus, Geert		Mahoney, Michael	
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Levis, Phil		Mahoor, Mohammad	
Li, Dalong		Maleki, Arian	
Li, Francis		Malin, Anna	
Li, Hongbin		Malipatil, Amaresh	
Li, Lin		Malloy, Matthew	
Li, Na		Mancino, Michele	
Li, Peng		Mandic, Danilo	
Li, Shang		Mane, Pravin	
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	
Liao, Wenjing		Marcos, Sylvie	MA2b-3
Liebelt, Michael		Margetts, Adam	TP6a-2
Lin, Bing-Rong		Markovic, Dejan	
Lin, Shu		Marple, S. Lawrence	
Lin, Tao		Marques, Antonio G	
Lin, Yonghua		Martin, Joshua S	
Liron, Guy		Marzetta, Thomas	
Liu, Chang		Marzetta, Thomas L	
Liu, Changchang		Masazade, Engin	
		Massey, Jackson	
Liu, Changchang			
Liu, Chih-Hao		Mathecken, Pramod	
Liu, Entao		Mathecken, Pramod	
Liu, Guifeng		Matsumoto, Tad	
Liu, Jingjing		Matz, Gerald	
Liu, Qiang		Matz, Gerald	
Liu, Weiqiang		Maurer, Alexander	
Liva, Gianluigi		Mavrychev, Evgeny	
Lopes, Amauri		Mawlawi, Baher	
Lopes, Cássio		Mazumdar, Kaushik	
Low, Steven		McEachen, John	
Lozano, Angel		McIlhenny, Robert	
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		Mecozzi, Antonio	
Luo, Wuqiong		Medard, Muriel	
Luo, Yi		Medard, Muriel	
Luo, Zhi-Quan		Medda, Alessio	
Luo, Zhi-Quan		Mendicute, Mikel	
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Lutz David	MD6a. 4	Marially Francoic	17.75 3
Lutz, David Ma, Wing-Kin		Mériaux, François Meyer, Florian	

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Milenkovic, Olgica		Navasca, Carmeliza	
Miller, Benjamin A		Nayyar, Ashutosh	
Milstein, Laurence B		Ndoye, Mandoye	
Min, Jae Hong		Nedic, Angelia	
		•	
Mirza, Usman Mazhar		Nedich, Angelia Nedich, Angelia	
Mirzaei, Golrokh		, 0	
Mitra, Urbashi		Needell, Deanna	
Mittal, Anish		Neely, Michael	
Mittal, Anish		Negro, Francesco	
Mo, Xuan		Nerguizian, Chahé	
Mo, Yilin		Netoff, Theoden	
Mohammadi, Jafar		Newey, Michael	
Mohan, Chilukuri		Ng, Brian	
Mohan, Seshadri		Nguyen, Anh	
Molavi, Pooya		Ni, Karl	
Molisch, Andreas F		Niesen, Urs	
Monga, Vishal		Nikiforov, Igor	
Montalban, Rafael		Nokleby, Matthew	
Montanari, Andrea		Nordholm, Sven	
Mookherjee, Soumak		Noshad, Mohammad	
Moon, Todd		Nounou, Hazem	
Moon, Todd	MP8a2-3	Nounou, Mohamed	
Moon, Todd K		Nowak, Robert	
Moorthy, Anush		Ober, Raimund	
Moorthy, Anush	TP8b1-13	O'Donnell, Rich	MA8b2-8
Morency, Matthew	TP7a-1	O'Donoughue, Nicholas	
Morgado, Eduardo	MA8b1-8	Ogunfunmi, Tokunbo	
Morral, Gemma	TP1b-1	Øien, Geir Egil	MP4a-2
Mortazawi Molu, Mehdi	TP8a1-4	Oksanen, Jan	
Moses, Randolph	MA8b2-13	Olivo-Marin, Jean-Christophe	MP7b-1
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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	Oyarzun, 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		Pal, Piya	
Nafie, Mohammed	TA8b1-11	Pal, Piya	
Naguib, Eman	TA8b1-2	Palaniappan, Ramanathan	TA5a-2
Naik, Manjish	MP8a2-13	Palmer, Jennifer	
Najafi, Seyedreza		Panahi, Ashkan	
Nanda, Rashmi		Panavides, Andreas	
Nannarelli, Alberto		Paolini, Enrico	WA1a-1
Nannarelli, Alberto		Papadopoulos, Haralabos C.	
Nascimento, Vitor		Papandreou-Suppappola, An	
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Nascimento, Vitor		Papandreou-Suppappola, An	
Natesan Ramamurthy, Kartl			TP8b2-5
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1	Navasca, Carmeliza	
1	Nayyar, Ashutosh	TA3b-4
2	Ndoye, Mandoye	
1	Nedic, Angelia	
1	Nedich, Angelia	TP1a-2
1	Nedich, Angelia	
2	Needell, Deanna	
3	Neely, Michael	TP1a-1
3	Negro, Francesco	TP5b-3
1	Nerguizian, Chahé	MA4b-4
1	Netoff, Theoden	TA7a-4
1	Newey, Michael	TP8b1-16
2	Ng, Brian	
3	Nguyen, Anh	
2	Ni, Karl	WA5b-3
4	Niesen, Urs	
1	Nikiforov, Igor	
3	Nokleby, Matthew	
1	Nordholm, Sven	TP7h-5
3	Noshad, Mohammad	
)	Nounou, Hazem	
3	Nounou, Mohamed	
) 1	Nowak, Robert	
+ 3	Ober, Raimund	VVA30-3
3	O'Donnell, Rich	MAORO 0
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	O'Donoughue, Nicholas	
3	Ogunfunmi, Tokunbo	
1	Øien, Geir Egil	
1	Oksanen, Jan	
3	Olivo-Marin, Jean-Christophe	
1	O'Neill, Maire	
1	Onic, Alexander	
4	Oppenheim, Alan V	
1	Oppenheim, Irving	
2	Orlando, Danilo	
1	Oyarzun, Miguel	MA8b2-8
4	Ozdemir, Onur	
2	Ozel, Omur	
5	Ozmen, Mustafa	MA4b-3
1	Pajovic, Milutin	
2	Pal, Piya	TA3b-2
1	Pal, Piya	
2	Palaniappan, Ramanathan	TA5a-2
3	Palmer, Jennifer	MP7b-2
2	Panahi, Ashkan	WA7b-1
3	Panayides, Andreas	MP5a-4
1	Paolini, Enrico	
4	Papadopoulos, Haralabos C	TA3a-4
3	Papandreou-Suppappola, Ant	tonia
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Parhi, Keshab K		Raghavan, Vasanthan	
Park, Hyuncheol		Raj, Raghu	
Park, Yun		Rajan, Adithya	
Parker, Jason		Ramasamy, Dinesh	
Pascal, Frédéric		Rambeloarison, Muriel L	
Pastore, Adriano		Rambo-Roddenberry, Mich	
Patel, Gaurav		Ramos, Javier	
Pattichis, Constantinos		Ramprashad, Sean A	
Pattichis, Marios		Randel, Sebastian	
Pattichis, Marios		Rangarajan, Sampath	
Patton, Lee		Rangarajan, Sampath	
Paul, Steffen		Rao, Bhaskar	
Paulraj, Arogyaswami		Rao, Bhaskar	
, 0,		Rao, Bhaskar D	
Peleato, Borja		Rao, Bhaskar D	
Pennanen, Harri		Rao, Briaskar D	
Pepin, Matthew		Rasmussen, Lars K	
Perlaza, Samir			
Pesavento, Marius		Ratnarajah, Tharm	
Pesavento, Marius		Ratnarajah, Tharm	
Pesavento, Marius		Ratnarajah, Tharm	
Petricca, Massimo		Ratnarajah, Tharmalingam	
Petricca, Massimo		Rauhut, Holger	
Phan, Thien		Rawlings, Dustin	
Phelps, Ethan		Razavi, Seyed Morteza	
Phillips, Braden		Razavi, Seyed Morteza	
Phillips, Rhonda		Razaviyayn, Meisam	
Phillips, Rhonda		Razaviyayn, Meisam	
Pi, Zhouyue		Re, Marco	
Pitaval, Renaud-Alexandre		Re, Marco	
Pitaval, Renaud-Alexandre		Re, Marco	
Plan, Yaniv		Re, Marco	
Pontarelli, Salvatore		Rebeiz, Eric	
Pontifex, Damien		Reddy, Bharath Kumar	
Poor, H. Vincent		Renaux, Alexandre	
Poor, H. Vincent		Reyes Membreno, Carolin	
Poor, H. Vincent		Dibaira Alaiandra	MP2a-1
Poulliat, Charly		Ribeiro, Alejandro	
Pound, Andrew		Ribeiro, Alejandro	
Pourhomayoun, Mohammad		Ricci, Giuseppe	
Pourhomayoun, Mohammad		Ricci, Giuseppe	
Pourhomayoun, Mohammad		Richard, Cédric	
Prasad, Narayan		Richmond, Christ D	
Preisig, James		Rico-Alvariño, Alberto	
Preisig, James		Riedl, Thomas	
Prince, Jerry		Riegler, Erwin	
Pugh, Matthew		Riihijarvi, Janne	
Pugh, Matthew		Riihonen, Taneli	
Purmehdi, Hakimeh		Riihonen, Taneli	
Raake, Alexander		Riihonen, Taneli	
Rabbat, Michael		Ritcey, James	
Radhakrishnan, Chandrasek		Ritcey, James	
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Raeman, David	MA8b2-8	Rodriguez, Arturo	TP8b1-9

NAME Rodríguez Fonollosa, Javier.	SESSION	NAME Scharf, L
Rodriguez-Marek, Esteban		Scharf, L
		Schenk,
Roemer, Florian		Schlecht
Rohde, G.K		Schniter,
Rolny, Raphael		Schniter,
Rolny, Raphael		
Romberg, Justin		Schniter
Romberg, Justin		Schober
Römer, Florian		Schramr
Romero, David		Schramr
Romero, David		Schreck,
Roozgard, Aminmohammad.		Schroed
Roozgard, Aminmohammad.		Schroete
Roque, Damien		Schulte,
Ross, Jeremy		Schume
Rossi, Marco		Seco-Gr
Rossler, Carl		Seifallah
Rotolo, Anthony		Sellathu
RoyChowdhury, Sohini		Seo, Sui
Rozell, Christopher J		Serpedir
Ruan, Liangzhong (Steven)	MP3b-2	Seto, Ko
Rübsamen, Michael	MP2a-4	Severi, S
Rupp, Markus	MP2a-1	Severing
Rupp, Markus	TA8a2-3	Sezgin, /
Rupp, Markus	TP2a-3	Shahbaz
Rusek, Fredrik	MP3a-3	Shahbaz
Ryf, Roland	TA1a-4	Shanbha
S Varma, Vineeth		Shariati,
Saad, Michele		Sharma,
Sabharwal, Ashutosh		Shen, H
Sabharwal, Ashutosh	TP6a-1	Sheng, c
Sabharwal, Ashutosh		Shi, Jian
Sadeghian, Masoud		Shi, Qin
Sahai, Achaleshwar		Shi, Wei
Sahraeian, Sayed Mohamma	d Ebrahim	Shi, Wei
	TA7a-3	Shin, Wo
Sala, Frederic	TP4a-2	Shirani,
Sale, Darryl	MP8a2-11	Shirani,
Saleh, Ghada	TA8b1-11	Shirani,
Saloranta, Jani		Shtaif, M
Sanders, Wes	TA7b-2	Shynk, J
Sankar, Lalitha		Siclet, C
Santhanam, Balu		Siegel, F
Santiago, Dan		Siegmun
Saville, Michael		Siffert, R
Sayed, Ali		Sigurdso
Sayed, Ali		Sinanovi
Sayed, Ali		Singer, A
Sayed, Ali		0 /
Scaglione, Anna		Singer, A
Scaglione, Anna		Singer, A
Scaglione, Anna		Singer, A
Schad, Adrian		Sinopoli,
Schaeffer, Hayden		Siohan,
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Scharf, Louis	
Scharf, Louis L	
Schenk, Andreas	MA8b1-4
Schlechter, Thomas	MA8b1-10
Schniter, Phil	MA3b-2
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Schniter, Philip	TP6a-2
Schober, Robert	MP3a_1
Schrammar, Nicolas	
Schrammar, Nicolas	
Schreck, Jan	
Schroeder, Jim	
Schroeter, Carola	
Schulte, Michael	
Schumer, Sean	
Seco-Granados, Gonzalo	TA8b1-3
Seifallah Jardak, Jardak	TP7a-4
Sellathurai, Mathini	TA8b2-3
Seo, Sung Lock	
Serpedin, Erchin	
Seto, Koji	
Severi, Stefano	
Severinghaus, Robert	
Sezgin, AydinShahbazPanahi, Shahram	NADOL 2
Snandazpanani, Snanram	IVIP2D-3
ShahbazPanahi, Shahram	
Shanbhag, Naresh	MA6b-4
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Shariati, Nafiseh Sharma, Amy Shen, Hao	MP8a1-11 MP7b-2 TP5a-4
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Shariati, Nafiseh Sharma, Amy Shen, Hao	MP8a1-11 MP7b-2 TP5a-4 MA8b1-13
Shariati, Nafiseh	MP8a1-11 MP7b-2 TP5a-4 MA8b1-13 MP1a-1
Shariati, Nafiseh	MP8a1-11 MP7b-2 TP5a-4 MA8b1-13 MP1a-1 MVA6b-1
Shariati, Nafiseh	MP8a1-11 MP7b-2 TP5a-4 MA8b1-13 MP1a-1 WA6b-1 TA8b2-9
Shariati, Nafiseh	MP8a1-11 MP7b-2 TP5a-4 MA8b1-13 MP1a-1 MP6b-1 TA8b2-9 WA1b-1
Shariati, Nafiseh	MP8a1-11 MP7b-2 TP5a-4 MA8b1-13 MP1a-1 WA6b-1 TA8b2-9 WA1b-1
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1XA8b2-9WA1b-1TA8b2-2TP8b1-10
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1XA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1XA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1XA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1XA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8b1-9
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1XA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8b1-9TA2b-4
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1XA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8b1-9TA2b-4MA8b1-2
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8b1-9TA8b1-9TA8b1-9TA8b1-9TA8b1-9
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8b1-9TA8b1-9TA8b1-9TA8b1-9TA8b1-9
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8b1-9TA2b-4MA8b1-2TP8b2-1WA5b-4
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8b1-9TA2b-4MA8b1-2TP8b2-1WA5b-4TP8a1-8
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8a2-5TA8b1-9TA2b-4MA8b1-2TP8b2-1WA5b-4MA6b-4
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TA8b2-2TP8b1-10TP8b1-11TP8b1-12TA1a-2TA8a2-5TA8b1-9TA2b-4MA8b1-2TP8b2-1WA5b-4MA6b-4MP1b-4
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TP8b1-10TP8b1-11TA8b2-9TA1a-2TA8b1-9TA2b-4MA8b1-2TA2b-4MA8b1-2TP8b1-10TA9b1-9TA1-2TA8b1-9TA2b-4MA6b-4MP1b-4TP2b-2
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TP8b1-10TP8b1-11TA8b1-9TA8a2-9TA8a2-9TA8b1-9TA2b-4MA8b1-2TA9b1-4TA9b1-4MP1b-4TP8b1-4TP8b1-4MA6b-4MP1b-4TP2b-2WA3a-2
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TP8b1-10TP8b1-11TA8b2-9TA1a-2TA8b1-9TA2b-4MA8b1-2TA9b1-1TP8b1-12TA9b1-9TA9b1-9TA9b1-9TA9b1-9TA9b1-9TA9b1-9TA9b1-9TA9b1-9TA9b1-9TP8b1-8MA6b-4MP1b-4TP2b-2WA3a-2TA4b-1
Shariati, Nafiseh	MP8a1-11MP7b-2TP5a-4MA8b1-13MP1a-1WA6b-1TA8b2-9WA1b-1TP8b1-10TP8b1-11TP8b1-12TA8a2-5TA8b1-9TA2b-4MA8b1-2TA2b-4MA8b1-2TP8b1-10TA2b-4MA6b-4MP1b-4TP2b-2WA5b-4TP8b1-8

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NAME	SESSION	NAME	SESSION
Skoglund, Mikael		Swenson, Brian	
Skoglund, Mikael		Swindlehurst, A. Lee	
Slepcev, D		Swindlehurst, A. Lee	
Slock, Dirk		Swindlehurst, Arnold	
Slottke, Eric		Swindlehurst, Lee	
Sluciak, Ondrej		Sylvester, Dennis	
Sohn, Jongwook		Taghizadeh Motlagh, Seyed	
Solh, Mashhour		Taheri, Omid	
Soljanin, Emina		Tai, Ying	
Song, Xiufeng		Tajan, Romain	
Soo Min, Lee		Tajer, Ali	
Sorensen, Mikael		Talwar, Saurabh	
Spanias, Andreas		Tan, Sam	
Spanias, Andreas		Tang, Yi	
Spanias, Andreas		Tang, Zijian	
Spors, Sascha		Tay, Wee Peng	
Springer, Andreas		Tayem, Nizar	MA8b2-5
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Stafford, Phillip		Temel, Dogancan	
Stan, Mircea	TA6a-1	ten Brink, Stephan	MP3a-2
Stanacevic, Milutin	MA8b2-14	ten Brink, Stephan	TA8b2-6
Stanacevic, Milutin	MA8b2-15	Tepedelenlioglu, Cihan	
Stanczak, Slawomir	TP8a1-7	Tepedelenlioglu, Cihan	TP2a-2
Stanczak, Slawomir	WA1b-4	Tepedelenlioglu, Cihan	
Stankovic, Lina	TP8b1-3	Tepedelenlioglu, 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	
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, Millica	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		Tirkkonen, Olav	MP8a1-7
Studer, Christoph		Togneri, Roberto	TP7b-4
Studholm, Colin		Togneri, Roberto	
Su, Che-Chun	TA5a-1	Tölli, Antti	MP8a1-5
Su, Guolong		Tölli, Antti	
Su, Hsuan-Jung		Toni, Laura	TA1b-2
Sugavanam, Nithin		Tu, Sheng-Yuan	MP1b-3
Sui, Chao		Tufvesson, Fredrik	
Sullivan, Michael		Tummala, Murali	
Summerson, Samantha		Tuninetti, Daniela	
Sun, Jinping	MA8b2-11	Tutuncuoglu, Kaya	
Sun, Liang		Tuuk, Peter	
Sun, Ruoyu		Tygel, Martin	
Sun, Yang		Ulukus, Sennur	
Swami, Ananthram		Urriza, Paulo	
Swartzlander. Earl		Usman Khan, Muhammad	
Swartzlander, Earl		Utschick, Wolfgang	
Swartzlander, Jr., Earl		Utschick, Wolfgang	TARK2-9
Swartzlander, Jr., Earl E		Vaccari, Andrea	
owanzianuti, Ji., Lan E	IAJU-4	vaccaii, Ailuita	1

NAME Vadivel, Karthikeyen Shanmu	SESSION uga TP6b-2	NAI Wilco
Vaezi, Mojtaba		Wild
Vaidyanathan, P. P		Wille
Vakili, Sattar		Willia
van der Schaar, Mihaela		Wink
van der Veen, Alle-Jan		Winz
Vannithamby, Rath		Winz
Varshney, Pramod		Witte
Vedadi, Farhang		Wittr
Venkateswaran, Sriram		Wittr
Venkitasubramaniam, Parv		Woo
Venosa, Elettra		Woo
Verma, Pramode		Wu,
Verma, Pramode		Wu,
Vese, Luminita		Xave
Viberg, Mats		Xavi
Villalba, Julio		Xiao
Vishwanath, Arun		Xiao
Vojcic, Branimir		Xie,
Vorobyov, Sergiy		Xio,
Vorobyov, Sergiy A		Xin, Xing
		Xu, A
Voyles, Richard		Yaak
Vunnala Satranaranava		
Vuppala, Satyanaranaya W. H. Khong, Andy		Yang
		Yang Yang
Wadood Majid, Mohammad		
Wagner, Kevin		Yang
Wai, Hoi-To		Yang
Wakin, Michael		Yeat
Walters, George		Yelle
Wang, Chao		Yene
Wang, Guohui		Yerra
Wang, Guohui		Yi, X
Wang, Jiaheng		Yilm
Wang, Junsong		Yin,
Wang, Qi		Yin,
Wang, Qing		Ylioi
Wang, Tong		Yoor
Wang, W		Your
Wang, Xiaodong		Yu, E
Wang, Yue		Yu, Z
Wang, Zhanyong		Yue,
Wang, Zhaohui		Zakh
Wang, Zhengdao		Zakh
Wang, Zhifang		Zara
Weiss, Anthony J		Zaso
Wen, Qingsong		Zenç
Werner, Stefan		Zerg
Wichman, Risto	MA8b1-12	Zerg
Wichman, Risto		Zhar
Wiegand, Till	TP4a-1	Zhar

Ň	NAME Wilcox, Dave	SESSION
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- I -1	Wild, Thorsten Willerton, Marc	
	,	
-9	Willett, Peter	
-2	Willett, Peter	
-4	Willett, Peter	
-8	Williams, Gustavious P	
-1	Winkelbauer, Andreas	
11	Winzer, Peter	
-3	Winzer, Peter	
12	Witte, Matthias	
10	Wittneben, Armin	
-1	Wittneben, Armin	
-3	Woo, Jonghye	
15	Woods, Roger	
-5	Wu, Jinhong	
-6	Wu, Michael	
-3	Xaver, Florian	
-1	Xavier, Joao	TP2b-4
-2	Xiao, Qiang	TP8a1-9
-2	Xiao, Yuanzhang	
13	Xie, Yao	
-1	Xin, Yan	
-1	Xing, Fangxu	
-8	Xu, Aolin	
-2	Yaakobi, Eitan	
-3	Yang, Hong	
-7	Yang, Hyun Jong	
-4	Yang, Liuqing	
-4	Yang, Sheng	
-1	Yang, Wen-Yun	
-3	Yeatman, Eric	
-3	Yellepeddi, Atulya	
-2	Yener, Aylin	
-3	Yerramalli, Srinivas	
-3 -4	Yi, Xinping	
11	Yilmaz, Ferkan	MD42 2
-4	Yin, Bei	
-	Yin, Bei	
-6 -4	Ylioinas, Jari	
-		
-1	Yoon, Byung-Jun	
-3	Young, Derek	
-3	Yu, Bea	
-1	Yu, Zhenhua	
-4	Yue, Xiaodong	
-3	Zakharov, Yuriy	
-3	Zakharov, Yuriy	
-4	Zaragoza-Martínez, C. C	
-2	Zasowski, Thomas	
-4	Zeng, Yong	
12	Zerguine, Azzedine	TA8a2-10
12	Zerguine, Azzedine	
-1	Zhang, Fan	
-1	Zhang, Jianshu	MP2b-2

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Zhang, Jianzhong		
Zhang, Jun	MP8a2-5	
Zhang, Jun Jason		
Zhang, Jun Jason	TP8b2-5	
Zhang, Rui	MP2b-4	
Zhang, Xiaojie (Eric)	TA2b-4	
Zhang, Xue	WA7a-3	
Zhao, Qing		
Zhao, Qing	TA8b1-8	
Zhao, Xiaochuan		
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		
Zu, Keke	MP8a1-3	
Zuk, Or		
Zummo, Salam	WA2a-4	

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