THIRTY-SIXTH ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS

November 3-6, 2002
Asilomar Hotel and
Conference Grounds

In Cooperation with

IEEE Signal Processing Society®

THIRTY-SIXTH ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS & COMPUTERS

Organized in cooperation with

NAVAL POSTGRADUATE SCHOOL
Monterey, California

MISSION RESEARCH CORPORATION
Monterey, California

and

IEEE SIGNAL PROCESSING SOCIETY

CONFERENCE COMMITTEE

Welcome from the General Chairman

Benjamin Friedlander, University of California, Santa Cruz

Welcome to the Thirty-Six Asilomar Conference on Signals, Systems, and Computers. I hope that you will enjoy the beautiful conference grounds, the outstanding technical program, and the warm and informal atmosphere of this conference. The Asilomar conference attracts quite a few long- time attendees who find it to be a very special and worthwhile event. If this is your first Asilomar conference, I hope that you will find it to be as memorable an experience as many of us have in the past.

For the Sydney Parker Memorial Lecture at the opening of the conference, we are fortunate to have Professor David Haussler, Director of the UCSC Center for Biomolecular Science and Engineering at the University of California, Santa Cruz, who will deliver a keynote address on "Computational Analysis of the Human and Mouse Genomes". As a collaborator on the public Human Genome Project, Haussler and his team provided the first publicly available assembly of the human genome. The plenary session will be followed by a technical program that consists of approximately 35 lecture sessions and 10 poster sessions of invited and contributed papers.

In keeping with the long-standing Asilomar Conference tradition, our social program starts with a welcoming reception and social gathering on Sunday evening. A conference reception will be held on Monday evening.

It is not possible in this short message to properly thank and acknowledge all of the people who devoted time and effort to help organize this conference and to make it a truly outstanding event. However, I would like to take this opportunity to extend special thanks to Professor Louis Scharf who, with the assistance of an excellent Technical Program Committee, developed a superb technical program, and to the faculty and staff of the Naval Postgraduate School, who year after year give so generously of their time to make this conference a success.

This year marks the transition of the process of submitting technical papers to the conference to an on-line system. The new system represents a very significant improvement over the way this was done in the past. Special thanks are due to Michael Matthews for his work in making this transition happen smoothly.

On behalf of the Conference Committee I invite you to attend the Thirty-Six Asilomar Annual Conference on Signals, Systems, and Computers, to participate in the exciting technical program and to enjoy the accompanying social events. I look forward to seeing you all at the conference!

Benjamin Friedlander

Conference Steering Committee

PROF. CHARLES W. THERRIEN,
Chairman
Dept. of Electrical & Computer Eng.
833 Dyer Road, Room 437,
Code EC/Ti
Naval Postgraduate School
Monterey, CA 93943-5121

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

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

PROF. VICTOR DEBRUNNER
Dept. of Electrical & Computer Engineering
University of Oklahoma
202 West Boyd Street, Room 219
Norman, OK 73019-0631

PROF. MONIQUE P. FARGUES
Dept. of Electrical & Computer Eng.
833 Dyer Road, Room 437,
Code EC/Fa
Naval Postgraduate School
Monterey, CA 93943-5121

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

PROF. FREDERIC J. HARRIS
Dept. of Electrical Engineering
San Diego State University
San Diego, CA 92115

PROF. W. KENNETH JENKINS
Dept. of Electrical Engineering
The Pennsylvania State University
129 Electrical Engineering East
University Park, PA 16802-2705

DR. MICHAEL B. MATTHEWS
Mission Research Corporation
10 Ragsdale Drive, Suite 201
Monterey, CA 93940

PROF. JAMES A. RITCEY
Dept. of Electrical Engineering
Box 352500
University of Washington
Seattle, WA 98195

PROF. MICHAEL A. SODERSTRAND
Head, School of Electrical & Computer Eng.
202 Engineering South
Oklahoma State University
Stillwater, OK 74078

DR. SAMUEL D. STEARNS
Sandia National Laboratories
3705 Utah NE
Albuquerque, NM 87110

PROF. EARL E. SWARTZLANDER, JR.
Dept. of Electrical & Computer Eng.
University of Texas at Austin
Austin, TX 78712

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

DR. STANLEY A. WHITE
SPACE Corp.
433 E. Avenida Cordoba
San Clemente, CA 92672

2002 Asilomar Technical Program Committee

Chairman
Prof. Louis L. Scharf
Colorado State University, Ft. Collins

2002 Asilomar Technical Program Committee Members

Doug Cochran
DARPA/DSO
3701 North Fairfax Drive
Arlington, VA 22202-1714
dcochran@darpa.mil

Babak Hassibi
Dept. of Electrical Engineering
California Institute of Technology
1200 East California Blvd, MC 136-93
Pasadena, CA 91125
hassibi@caltech.edu

Alfred O. Hero, III
Dept. of Elec. Eng. & Comp. Sc.
University of Michigan
4429 Dept. of Elec. Eng. & Comp. Sci.
1301 Beal Avenue
Ann Arbor, MI
hero@eecs.umich.edu

Peyman Milanfar
Dept. of Electrical Engineering
237 Baskin Engineering Building
1156 High Street
Santa Crua, CA 95064-1077
milanfar@ee.ucsc.edu

Mark Smith
School of Elec. & Computer Eng.
Georgia Institute of Technology
777 Atlantic Drive
Atlanta, GA 30332-0250
mjts@ece.gatech.edu

John Tague
Office of Naval Research
Code 321(US)
800 North Quincy Street
Arlington, VA 22217-5660
taguej@onr.navy.mil

John Treichler
Applied Signal Technology, Inc.
460 California Ave.
Sunnyvale, CA 94086
jrt@appsig.com

Sally Wood
Electrical and Computer Engineering Department,
Santa Clara University
Santa Clara, CA 95053
swood@scu.edu

2002 Asilomar Conference Session Schedule

Sunday Afternoon, November 3

2:00-6:00pm	Registration
7:30-9:00pm	Welcoming Reception at Asilomar

Monday Morning, November 4

7:30-9:00am	Breakfast is available in Crocker Dining Hall
8:00am - 6:00pm	Registration
8:15-9:45am	MA1a Conference Opening and Plenary Session
9:45-10:15am	Coffee Social

10:15-12:00pm MORNING SESSIONS

MA1b	Iterative Decoding	Shu Lin
MA2b	Network Measurement and Mapping	Rob Nowak
MA3b	Low Power DSP Systems	Neeraj Magotra
MA4b	Adaptive Signal Processing Applications in Communications	Jim Schroeder
MA5b	Wireless Communications	TBD
MA6b	Information Theoretic Imaging	Pierre Noulin
MA7b	Coding	TBD
MA8b	Speech and Audio (Poster)	Keith Teague

12:00-1:00pm Lunch - Crocker Dinning Hall

Monday Afternoon, November 4

1:30-5:10pm AFTERNOON SESSIONS

MP1	Distributed Coding	Bernd Girod
MP2a	Iterative Methods in MIMO Systems	Long Tong
MP2b	Signal Processing for Genomics	Dan Furhmann
MP3	Filter Design and Structures	Lina Karam
MP4	Multichannel Equalization for Wireless Communications	Brian Evans
MP5	Sonar Signal Processing	Norm Owsley
MP6	Image Analysis and Applications	Hamid Krim
MP7	MIMO Communications Systems I	TBD
MP8a	Communications I (Poster)	TBD
MP8b	Blind Equalization (Poster)	Mike Larimore

Monday Evening, November 4

7:00-9:00pm Conference Reception

2002 ASILOMAR CONFERENCE SESSION SCHEDULE (continued)

Tuesday Morning, November 5

7:30-9:00am	Breakfast
8:00am - 5:00pm	Registration

8:30am - 12:10pm MORNING SESSIONS

TA1	Ultra-Wideband Communications	Uibashi Mitra
TA2	Geometry and Invariance in Signal Processing	Steve Smith
TA3	Filter Banks and Wavelets	Truong Nguyen
TA4	Simulation in Filtering and Stochostic Approximation	Vikram Kristramunthy
TA5	Emerging Techniques in Array Processing	Michael Clark
TA6	Inverse Problems in Imaging	W. Clem Karl
TA7a	Pattern Recognition	Ralph Hippenstiel
TA7b	Denoising	Ralph Hippenstiel
TA8a	Implementations and Nonlinear Adaptive Algorithms (Poster)	Michael G.Larimore
TA8b	Efficient DSP Hardware (Poster)	Vincent Mooney

12:00-1:00pm Lunch

Tuesday Afternoon, November 5

1:30-5:10pm AFTERNOON SESSIONS

TP1	Space-Time Communications	Hamid Jafarkhani
TP2	Communication Networks and Signal Processing	Brian Sadler & Ananthram Swami
TP3	Data Hiding	Charles Boncelet
TP4	Adaptive Equalization, Channel Estimation, and Echo Cancelling	Rick Johnson
TP5	Array Processing Foundations	James Ward
TP6	Internet Video Streaming	Bernd Girod
TP7	Optimization of MIMO Channel Capacity and Space-Time Coding	Michael Zatman
TP8a	Imaging for Target Detection	Sally Wood
TP8b	CDMA (Poster)	TBD

Wednesday Morning, November 6

7:30-9:00	Breakfast
8:00-12:00	Registration - Papers must be turned in before the registration closes at 12:00 noon

8:30-12:10 MORNING SESSIONS

WA1	Wireless Communications and Networks	Andrea Goldsmith
WA2	Time-Frequency Distributions for Nonstationery Random Processes	Alfred Hanssen
WA3	Arithmetic and Hardware Implementations	fred harris
WA4	Adaptive Source Separation	Scott Douglas
WA5	Antenna Arrays and MIMO Systems	Michael Zoltowski
WA6	Still Image Compression	Roberto Manduchi
WA7	Estimation	Darryl Morrell
WA8a	OFDM (Poster)	Sally Wood
WA8b	Communications II	TBD

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

2002 Asilomar Conference Session Schedule

Coffee breaks will be at 10:10 am and 3:10 pm. (Except Monday morning when refreshments will be served outside Chapel from (9:45-10:15.)

Monday, November 4

CONFERENCE OPENING AND PLENARY SESSION 8:30 – 9:45 AM

1. Welcome from the General Chairperson:

Benjamin Friedlander
University of California, Santa Cruz

2. Session MA1a - Distinguished Lecture for the 2002 Asilomar Conference

Dr. David Haussler
Director of the UCSC Center for Biomolecular Science and Engineering
University of California, Santa Cruz

Computational Analysis of the Human and Mouse Genomes

Abstract
Last year the International Human Genome Sequencing Consortium produced and annotated the initial public working draft of the human genome. The working draft sequence was assembled and made available at the University of California at Santa Cruz at http://genome.ucsc.edu. At this site and related, linked sites at the National Center for Biotechnology Information and the European Bioinformatics Institute, biomedical researchers worldwide are currently exploring this data in an attempt to comprehend the genetic blueprint for the human body. Key in this effort is the recently assembled working draft of the mouse genome. Because at least 95% of human genes are thought to have counterparts with similar functions in mouse, comparisons between these first two mammalian genome sequences is expected to yield a wealth of information. We will discuss what initial computational analysis has revealed about the structure and evolution of these mammalian genomes, and how insights from genome analysis will ultimately lead to new treatments for human disease.

Professional Biography

David Haussler is an investigator for the Howard Hughes Medical Institute. He holds the UC Presidential Chair in Computer Science at the Santa Cruz Campus, he is a consulting professor for the Stanford Medical School and the University of California San Francisco Biopharmaceutical Sciences Department, a Fellow of the American Association for Artificial Intelligence (AAAI), and a member of the nominating committee for the International Society for Computational Biology. He is a past chairman of the Steering Committee for the Computational Learning Theory Confer-

ences (COLT), an Associate Editor for the Journal of Computational Biology, and was an action editor for the journal Machine Learning. He is currently Director of the Center for Biomolecular Science & Engineering at UCSC and scientific co-director of the multi-campus Institute for Bioengineering, Biotechnolgy and Quantitative Biomedical Research at USCF, UCB and UCSC.

Professor Haussler has received a B.A. in Mathematics, Connecticut College, M.S. in Applied Mathematics, California Polytechnic State University, San Luis Obispo, and a Ph.D. in Computer Science, University of Colorado at Boulder. His research interests are in several areas, including: genomics, bioinformatics, machine learning, statistical decision theory, pattern recognition, neural networks, algorithms and complexity. He is a member of the ACM, IMS, AAAS, and the IEEE.

As a collaborator on the public Human Genome Project, Haussler and his team provided the first publicly available assembly of the human genome, posted on http://genome.ucsc.edu on July 7, 2000. His team's extensive analysis of the human and mouse genome sequences is available on the interactive browser at that site, which receives more than 50,000 page requests on a typical weekday. He is known for his pioneering applications of hidden Markov models (HMMs) to the problem of predicting gene structures in genomic DNA, and for the application of support vector machines and HMMs to the problem of classifying newly sequenced proteins into known fold families. HMMs are now the dominant methodology used in computational gene structure prediction, forming the basis for the gene predictions in the Drosophila melanogaster, mouse and human genomes. Methods introduced by Haussler are also used in several online protein sequence classification databases. In addition to other honors, in recognition of his contributions to the field of bioinformatics, Haussler was selected as R&D Magazine's 2001 Scientist of the Year, following J. Craig Venter, Leroy Hood, and other distinguished previous recipients of this award.

Program of 2002 Asilomar Conference on Signals, Systems and Computers

Technical Program Chairman
Louis L. Scharf
Colorado State University, Ft. Collins

Track 1 - Communications

Session MA1b Iterative Decoding

Session Chair: *Shu Lin*

MA1b-1 Iteratively Decodable Codes for Bridging the Shaping Gap in Communication Channels — 10:15 AM
Xiao Ma, Harvard University

MA1b-2 Performance Analysis and Design of LDPC Codes for Rayleigh Fading Channels — 10:40 AM
Krishna Narayanan, Texas A&M University

MA1b-3 Shuffled Belief Propagation Decoding — 11:05 AM
Juntan Zhang, Marc Fossorier, University of Hawaii

MA1b-4 A Comparison of Low Complexity Turbo-like Code Designs — 11:30 AM
Daniel Costello, Adrish Banerjee, Univ. of Notre Dame

MA1b-5 List-decoding of Variable-length Codes with Application in Joint Source-Channel Coding — 11:55 AM
Ahmadreza Hedayat, Aria Nosratinia, The University of Texas at Dallas

Track 2 - Signal Processing

Session MA2b Network Measurement and Mapping

Session Chair: *Rob Nowak*

MA2b-1 Multiscale connection level analysis of network traffic — 10:15 AM
Shriram Sarvotham, Rudolf Riedi, Richard Baraniuk, Rice University, Houston, Texas

MA2b-2 Network Tomography Using Passive End-to-End Measurements — 10:40 AM
Lili Qiu, Venkata Padmanabhan, Microsoft Research

MA2b-3 Network Tomography and the Identification of General Topologies — 11:05 AM
Michael Rabbat, Robert Nowak, Rice University
Mark Coates, McGill University

MA2b-4 Multicast internal delay estimation via pseudo likelihood — 11:30 AM
Gang Liang, Bin Yu, University of California, Berkeley

Track 3 - DSP

Session MA3b Low Power DSP Systems

Session Chair: *Neeraj Magotra*

MA3b-1 A Low-Power Architecture for Maximum a Posteriori Turbo-Decoding — 10:15 AM
Marisa Lopez-Vallejo, Universidad Politecnica de Madrid
Syed Aon Mujtaba, Inkyu Lee, Agere Systems

MA3b-2 Operand Modification Schemes for Reduced Power Multiplication — 10:40 AM
Peter-Michael Seidel, Southern Methodist University

MA3b-3 Tools and Methodologies for Power Sensitive Design — 11:05 AM
Jerry Frenkil, Sequence Design, Inc.

MA3b-4 Energy Efficient DSP Systems - Architecture and Algorithms Issues — 11:30 AM
Neeraj Magotra, Texas Instruments Inc.

Track 4 - Adaptive Systems

Session MA4b Adaptive Signal Processing Applications in Communications

Session Chair: *Jim Schroeder*

MA4b-1 Channel and Flow Adaptive Multiuser DMT — 10:15 AM
Soura Dasgupta, Ashish Pandharipande, University of Iowa

MA4b-2 A Multiplier-Free Adaptive Algorithm for Channel Equalization — 10:40 AM
Kelvin Rocha, Tamal Bose, Utah State University

MA4b-3 Power Control for CDMA Systems using Adaptive Kalman Filter and Linear Quadratic Control — 11:05 AM
Sylvie Perreau, Michael Anderson, Institute for Telecommunications Research
Lang White, University of Adelaide

MA4b-4 Receiver Timing Recovery for Adaptive Wavelet Packet Modulated Signals — 11:30 AM
Erik Kjeldsen, Scientific Research Corporation
Alan Lindsey, Air Force Research Lab (AFRL)/IFGC

MA4b-5 Channel Compensation Techniques In A Receiver With Adaptive MAI Suppression 11:55 AM
Mark Rice, Sanjeev Naguleswar, DSpace Prt. Ltd.
Jim Schroeder, Univ of South Australia

Track 5 - Array Processing

Session MA5b Wireless Communications

Session Chair:

MA5b-1 Joint Iterative Estimation and Decoding for 16-QAM BICM over Correlated Fading Channels 10:15 AM
Yuheng Huang, James Ritcey, University of Washington

MA5b-2 A simple low rate turbo-like code design for spread spectrum systems 10:40 AM
Durai Thirupathi, Keith Chugg, University of Southern California

MA5b-3 The Shannon channel capacity of a radar system 11:05 AM
Patrick Bidigare, Veridian Ann Arbor R&D Center

MA5b-4 Coded Cooperation under Slow Fading, Fast Fading, and Power Control 11:30 AM
Todd Hunter, Aria Nosratinia, The University of Texas at Dallas

MA5b-5 Comparing Power Consumptions of Collaborative and non-Collaborative Power Control Systems 11:55 AM
Vahid Emamian, Mostafa Kaveh, University of Minnesota

Track 6 - Imaging

Session MA6b Information Theoretic Imaging

Session Chair: *Pierre Noulin*

MA6b-1 Relative Entropy and Quantizer Mismatch 10:15 AM
Robert M. Gray, Stanford

MA6b-2 Image registration using entropic graph-matching criteria 10:40 AM
Huzefa Neemuchwala, Biomedical Engineering, University of Michigan
Alfred Hero, EECS, University of Michigan
Paul Carson, Department of Radiology, University of Michigan

MA6b-3 Intrinsic Shape 11:05 AM
Victor Hyeong-Seok Ha, Jose' M.F. Moura, Carnegie Mellon University

MA6b-4 Alternating Minimization Algorithms for Transmission Tomography Using Energy Detectors 11:30 AM
Joseph A. O'Sullivan, Donald L. Snyder, Bruce R. Whiting, Washington University

MA6b-5 On The Problem of Simultaneous Encoding of Magnitude and Location Information 11:55 AM
Rui Castro, Michael Wakin, Michael Orchard, Dept. of ECE, Rice University

Track 7 - Signal Processing and Communications

Session MA7b Coding

Session Chair:

MA7b-1 A Chernoff type error bound for Algebraic Soft-Decision Decoding of Reed Solomon codes 10:15 AM
Niranjan Ratnakar, Ralf Koetter, University of Illinois

MA7b-2 A New Method Of Optimal Coding 10:40 AM
Artyom Grigoryan, EE Department, The University of Texas at San Antonio

MA7b-3 Iterative channel estimation and decoding of pilot symbol assisted LDPC coded QAM over flat fading channels 11:05 AM
Huaning Niu, James Ritcey, University of Washington

MA7b-4 Binary Code Imbalance and Cyclic Correlation Sidelobes 11:30 AM
George M. Dillard, Brandon J. Zeidler, University of California-San Diego

MA7b-5 Asymptotic Probability Bounds on the Peak Distribution of Complex Multicarrier Signals 11:55 AM
Masoud Sharif, Babak Hassibi, California Institute of Technology

Track 8 - Poster Session

Session MA8b Speech and Audio

Session Chair: *Keith Teague*

MA8b-1 Perceptual Multiple Location Equalization with Clustering
Sunil Bharitkar, Chris Kyriakakis, University of Southern California (USC)

MA8b-2 Robustness of Spatial Averaging Equalization Methods: A Statistical Approach
Sunil Bharitkar, Philip Hilmes, Chris Kyriakakis, University of Southern California (USC)

MA8b-3 On the Relationship Between Root Interpolation and Lsp Interpolation
Khosrow Lashkari, DoCoMo USA Labs

MA8b-4 Joint Optimization of Model and Excitation in Celp-Type Speech Coders
Khosrow Lashkari, Toshio Miki, DoCoMo USA Labs

MA8b-5 Musical Instrument Recognition using Hidden Markov Model
Jonghyun Lee, Joohwan Chun, Dept. of EE &CS, KAIST

MA8b-6 Multistage Integer-to-Integer Multichannel Prediction for Scalable Lossless Audio Coding
David Mary, Dirk T.M. Slock, Eurecom Institute

MA8b-7 Wavelet Packet Cepstral Analysis for Speaker Recognition
Albert Kinney, U.S. Naval Security Group Activity Yokosuka, Japan, John Stevens, U.S. Navy

MA8b-8 Joint Pitch and Voicing Estimation for Multiband Excitation and Sinusoidal Speech Coders
Wenhui Jia, Brooktrout Technology
Wai-Yip Chan, Queen's University

MA8b-9 An Enhanced MultiBand Excitation Speech Coder at 2,400 b/s
Keith Teague, Oklahoma State University

MA8b-10 An Adaptive Multi-Stage Levinson-Durbin Algorithm
Rongshan Yu, Laboratories for Information Technology
Chi Chung Ko, Department of Electronic Engineering, National University of Singapore

MA8b-11 A System for Automatic Detection of Pathological Speech
Alireza A. Dibazar, Shrikanth Narayanan, University of Southern California

MA8b-12 A confidence-score based unsupervised MAP adaptation for speech recognition
Dagen Wang, Shrikanth Narayanan, University of Southern California

MA8b-13 Maximum Likelihood Constrained Adaptation for Multichannel Audio Synthesis
Athanasios Mouchtaris, Shrikanth Narayanan, Chris Kyriakakis, University of Southern California

Track 1 - Communications

Session MP1 Distributed Coding

Session Chair: *Bernd Girod*

MP1-1 Packetized Distributed Compression: Robustness to Packet Erasures — 1:30 PM
Rohit Puri, Sandeep Pradhan, UC Berkeley
Kannan Ramchandran, Univ. of Michigan

MP1-2 On Types of Redundancy and Multiple Description Coding — 1:55 PM
Michael T. Orchard, Rice University
Seila S. Hemami, Cornell Univ.

MP1-3 Wyner-Ziv Coding of Motion Video — 2:20 PM
Anne Aaron, Rui Zhang, Bernd Girod, Stanford University

MP1-4 Turbo Coding in the Slepian-Wolf and Multi-Access Channel Problems: Issues of Duality — 2:45 PM
Jan Bajcsy, Patrick Mitran, Charif Beainy, Bo Xu, McGill University

BREAK — 3:10 PM

MP1-5 Iterative Decoding Schemes for Source and Joint Source-Channel Coding of Correlated Sources — 3:30 PM
Javier Garcia-Frias, Ying Zhao, University of Delaware

MP1-6 Multiple Access Source Coding: Low Complexity Design and Source Independence — 3:55 PM
Qian Zhao, Sidharth Jaggi, Michelle Effros, California Institute of Technology

MP1-7 Design Considerations for Reversible Variable Length Codes — 4:20 PM
Ksenija Lakovic, John Villasenor, University of California, Los Angeles

MP1-8 On the performance of Integrated Interleaved Coding Scheme — 4:45 PM
Xiangyu Tang, Ralf Koetter, University of Illinois

MP1-9 Combined Source-Channel Coding for a Power and Bandwidth Constrained Noisy Channel with Application to Progressive Image Transmission — 5:10 PM
Marc Fossorier, University of Hawaii
Nouman Saeed Raja, Zixiang Xiong, Texas A&M University

Track 2 - Signal Processing

Session MP2a Iterative Methods in MIMO Systems

Session Chair: *Long Tong*

MP2a-1 Analysis and Design of Natural and Threaded Space-Time Codes with Iterative Decoding — 1:30 PM
Albert Guillen i Fabregas, Giuseppe Caire, Institut Eurecom

MP2a-2 Fast Iterative Decoding of Linear Dispersion Codes for Unknown MIMO Channels — 1:55 PM
Harold Artés, Vienna University of Technology
Franz Hlawatsch, TU Wien

MP2a-3 Iterative Detection of MIMO Signals with Linear Detectors — 2:20 PM
Melanie Witzke, Stephan Bäro, Frank Schreckenbach, Joachim Hagenauer, Institute for Communications Engineering (LNT)

MP2a-4 Low-Complexity Iterative Detection and Decoding of Multi-Antenna Systems Employing Channel and Space-Time Codes — 2:45 PM
Haris Vikalo, Stanford University
Babak Hassibi, California Institute of Technology

BREAK — 3:10 PM

Session MP2b Signal Processing for Genomics

Session Chair: *Dan Furhmann*

MP2b-1 Gene Filtering Using Posterior Pareto Fronts — 3:30 PM
Alfred Hero, Univ. of Michigan

MP2b-2 Detection of Multiple Overlapping Bands of Known Amplitude, with Application to DNA Fingerprinting — 3:55 PM
Daniel R. Fuhrmann, Washington University

MP2b-3 Digital filters for gene prediction applications — 4:20 PM
Palghat Vaidyanathan, Byung-Jun Yoon, California Institute Of Technology

MP2b-4 Clustering Methods for DNA Chromatograms — 4:45 PM
Elias Manolakos, Northeastern University

MP2b-5 A Clustering Algorithm for Gene Expression Data using the Wavelet Transform — 5:10 PM
Arvind Rao, University of Texas at Austin

Track 3 - DSP

Session MP3 Filter Design and Structures

Session Chair: *Lina Karam*

MP3-1 New Optimization Algroithms for Digital Communication Filters — 1:30 PM
James L. Sullivan, John W. Adams, California State University-Northridge

MP3-2 Design and Implementation issues in oversampled filter banks — 1:55 PM
Fabrice Labeau, McGill University

MP3-3 Mixing FIR Filters and Artificial Neural Networks for Time Series Analysis — 2:20 PM
Victor DeBrunner, Tristan Charpentier, The University of Oklahoma

MP3-4 Signal-Adapted Binary Tree-Structured Paraunitary Filter Bank Design — 2:45 PM
Gokce Dane, Truong Nguyen, University of California at San Diego

BREAK — 3:10 PM

MP3-5 A Specification Language for the Optimal Design of Exotic FIR Filters with Second-Order Cone Programs — 3:30 PM
Jeffrey Coleman, Dan Scholnik, Naval Research Laboratory

MP3-6 Using Variable Length Coefficients to Design Low-Space FIR filters for FPGAs — 3:55 PM
Victor DeBrunner, Linda DeBrunner, Xiaojuan Hu, The University of Oklahoma

MP3-7 Design of Optimal Multidimensional Minimum Phase Digital FIR Filters Using Discrete Hilbert Transforms — 4:20 PM
Niranjan Damera-Venkata, Hewlett-Packard
Brian Evans, The University of Texas at Austin
Jamal Tuqan, The University of California, Davis

MP3-8 The Role of Digital Filters in Sampling Theory for Non Bandlimited Signals: A Review — 4:45 PM
Bojan Vrcelj, Palghat Vaidyanathan, California Institute of Technology, 136-93

MP3-9 Narrowband Lowpass Digital Differentiator Design — 5:10 PM
Ivan Selesnick, Polytechnic University

Track 4 - Adaptive Systems

Session MP4 Multichannel Equalization for Wireless Communications

Session Chair: *Brian Evans*

MP4-1 Performance Comparisons of TEQ Design Techniques for FDD ADSL — 1:30 PM
Nirmal Warke, Arthur Redfern, Charles Sestok, Murtaza Ali, Texas Instruments

MP4-2 Blind, Adaptive Channel Shortening for Multicarrier Systems — 1:55 PM
Rick Martin, Jai Balakrishnan, William Sethares, Richard Johnson, Cornell University

MP4-3 Bit Rate Maximization with Optimal Time-Domain Equalizer Architecture — 2:20 PM
Milos Milosevic, Schlumberger
Lucio Pessoa, Motorola
Brian Evans, Ross Baldick, The University of Texas at Austin

MP4-4 ADSL Per-tone Equalizer Design Issues - A Status Report — 2:45 PM
Marc Moonen, Gert Cuypers, Koen Vanbleu, Geert Ysebaert, Catholic University at Leuven

BREAK — 3:10 PM

MP4-5 Optimum Joint Transmit-Receive Linear Processing for Vectored DSL — 3:30 PM
Daniel Palomar, Universitat Politecnica de Catalunya
Miguel Lagunas, Centre Tecnologic de Telecom. de Catalunya
John Cioffi, Stanford University

MP4-6 Near-End Crosstalk Cancellation in xDSL Systems — 3:55 PM
Rajeev Nongpiur, Dale Shpak, Andreas Antoniou, University of Victoria

MP4-7 Blind, Adaptive Channel Shortening by Sum-squared Auto-correlation Minimization — 4:20 PM
Richard Martin, Cornell University

MP4-8 Blind FIR Multichannel Estimation in Cyclic Prefix Systems — 4:45 PM
Dirk Slock, Eurecom Institute

MP4-9 Analysis of Equalizer-Based Baud-spaced Timing Recovery for Digital Subscriber Line Systems — 5:10 PM
Sven Haar, Dirk Daecke, Roland Zukunft, Fabian Vogelbruch, Munich University of Technology

Track 5 - Array Processing

Session MP5 Sonar Signal Processing

Session Chair: *Norm Owsley*

MP5-1 Comparison of Surface Radar Traffic Density Contact Records with Receive Levels from Separate Acoustic Data Sets — 1:30 PM
Charles Thompson, Bruce Gomes, NRL
Neil Williams, University of Miami
Kameron Corregan, Naval Surface Weapons Center

MP5-2 Site-Specific Sonar Adaptive Beamformer Performance Prediction — 1:55 PM
Norman Owsley, ONR

MP5-3 Environmental Acoustic Modeling of the Acoustic Observatory Site and Adaptive Beamformer Performance Implications — 2:20 PM
Robert Greene, Gerald Hebenstreit, Brian Sperry, SAIC

MP5-4 Results of the Acoustic Observatory Array Topology Study — 2:45 PM
Robert Greene, Peter Mikhalevsky, SAIC

BREAK 3:10 PM

MP5-5 Adaptive Beamforming in Non-Stationary Environments 3:30 PM
Henry Cox, ORINCON Corporation

MP5-6 Robust Eigenvector Adaptive Beamforming for Passive Sonar Arrays in Littoral Environments 3:55 PM
Stephen Kogon, MIT Lincoln Lab

MP5-7 Fast Subspace Updating Using Multistage Wiener Filter 4:20 PM
Yung Lee, Science Applications International Corporation

MP5-8 Quantitative Ambiguity Analysis for Matched-Field Source Localization 4:45 PM
Wen Xu, Arthur Baggeroer, Henrik Schmidt, MIT

MP5-9 Performance of Reduced-Complexity Multi-Channel Equalizers for Underwater Acoustic Communications 5:10 PM
John Flynn, James Ritcey, Warren Fox, Daniel Rouseff, University of Washington

Track 6 - Imaging

Session MP6 Image Analysis and Applications

Session Chair: *Hamid Krim*

MP6-1 Vision as a Sensor for Control and Interaction with the Physical World 1:30 PM
Stefano Soatto, University of California, Los Angeles

MP6-2 Mathematical Representations of Planar Shapes 1:55 PM
Anuj Srivastava, Eric Klassen, Florida State University

MP6-3 Probabilistic Analysis of Noisy Views of Symmetric Shapes 2:20 PM
Oleg Poliannikov, Hamid Krim, NC State University

MP6-4 A Symphony Algorithm for Image Parsing 2:45 PM
Zhuowen Tu, The Ohio State University

BREAK 3:10 PM

MP6-5 Multiscale Principal Components Analysis for Image Orientation Estimation 3:55 PM
Xiaoguang Feng, Peyman Milanfar, University of California, Santa Cruz

MP6-6 On the Origin of the Bilateral Filter and Ways to Improve It 3:55 PM
Michael Elad, Stanford University

MP6-7 On the Determination of Inconsistent Edges in Graph-Based Segmentation Algorithms 4:20 PM
Anupama Jagannathan, Eric Miller, Northeastern University

MP6-8 A Novel Motion Estimation Algorithm Using Phase Plane Correlation for Frame Rate Conversion 4:45 PM
Mainak Biswas, Truong Nguyen, University of California, San Diego

MP6-9 Contourlets: A New Directional Multiresolution Image Representation 5:10 PM
Minh Do, University of Illinois at Urbana-Champaign
Martin Vetterli, Swiss Federal Institute of Technology

Track 7 - Signal Processing and Communications

Session MP7 MIMO Communications Systems

Session Chair:

MP7-1 Joint MMSE versus V-BLAST and Antenna Selection 1:30 PM
Dhananjay Gore, Information Systems Laboratory, Stanford University
Alexei Gorokhov, UbiCOM group WY 6.61 Philips Research
Arogyaswami Paulraj, Information Systems Laboratory, Stanford University

MP7-2 Performance Analysis and Code Construction for Differential Unitary Space Time Modulation 1:55 PM
Xinying Yu, Brain Hughes, North Carolina State University

MP7-3 On MIMO Capacity with Partial Channel Knowledge at the Transmitter 2:20 PM
Abdelkader Medles, Samuli Visuri, Dirk T.M. Slock, Institut Eurécom

MP7-4 Characterizing the Statistical Properties of Mutual Information in MIMO Channels: Insights into Diversity-Multiplexing Tradeoff 2:45 PM
Ozgur Oyman, Rohit Nabar, Arogyaswami Paulraj, Stanford University
Helmut Boelcskei, ETH Zurich

BREAK 3:10 PM

MP7-5 Adaptive Modulation for Multiple Antenna Channels 3:30 PM
June Chul Roh, Bhaskar Rao, University of California, San Diego

MP7-6 Quantized Maximum Ratio Transmission for Multiple-Input Multiple-Output Wireless Systems 3:55 PM
David Love, Robert Heath, The University of Texas at Austin
Thomas Strohmer, University of California, Davis

MP7-7 Performance Limits on Beamforming with Finite Rate Feedback for Multiple Antenna Systems 4:20 PM
Krishna Mukkavilli, Ashutosh Sabharwal, Behnaam Aazhang, Rice University
Elza Erkip, Polytechnic University

MP7-8 Reduced-State Joint Sequence Estimation in MIMO Receivers 4:45 PM
Jianzhong Zhang, Nokia Research Center

MP7-9 Joint Decoding and Channel Estimation for Low-complexity STC 5:10 PM
Aydin Sezgin, Eduard Jorswieck, Heinrich-Hertz-Institut fuer Nachrichtentechnik Berlin GmbH

Track 8 - Poster Session

Session MP8a Communications I

Session Chair:

MP8a-1 Range Extension and Short Range Performance Enhancement in TDMA Digital Cellular
Bo Wei, Jerry Gibson, Southern Methodist University

MP8a-2 Reverse Link Inter-Cell Interference Analysis for Cellular CDMA Systems with Controlled Power Disparities
Hong Nie, P. Takis Mathiopoulos, Department of Electrical and Computer Engineering, University of British Columbia

MP8a-3 Structured Channel Estimation Based Decision Feedback Equalizers for Sparse Multipath Channels
Serdar Ozen, William Hillery, Michael Zoltowski, Purdue University
Sreenivasa Nereyanuru, Mark Fimoff, Zenith Electronics Corporation

MP8a-4 Differential Unitary Space-Time Modulation for a Large Number of Receive Antennas
Jibing Wang, Michael P. Fitz, Kung Yao, UCLA

MP8a-5 On the Influence of Uncertainties in MIMO Decoding Algorithms
Markus Rupp, TU Wien

MP8a-6 An Unequal Error Protection Scheme for Multiple Input Multiple Output Systems
Muhammad Sabir, Robert Heath, Alan Bovik, The University of Texas at Austin

MP8a-7 Beamspace-Time Coding for Directionally Concentrated Wireless Channels
Murat Torlak, The University of Texas at Dallas

MP8a-8 Spatial Diversity vs. Array Gain in Cellular Communication Systems
Benjamin Friedlander, University of California, Santa Cruz
Shimon Scherzer, Metawave Communications

MP8a-9 Resolving Ambiguities in Subspace-Based Blind Receiver for MIMO Channels
Visa Koivunen, Signal Processing Lab/Helsinki Univ. of Technology
Samuli Visuri, Helsinki Univ. of Technology

MP8a-10 Double-Directional Radio Channel Estimation Using M-D RARE
Marius Pesavento, Johann F. Bohme, Ruhr-University Bochum
Christoph F. Mecklenbrauker, Tech-Gate Vienna

MP8a-11 Multipath Beamforming with Ternary Sequences for UWB Channel
Di Wu, Predrag Spasojevic, Ivan Seskar, Rutgers University

MP8a-12 On the Performance and Implementation Issues of Block Turbo Codes with Antenna Diversity
Yanni Chen, Keshab Parhi, University of Minnesota

MP8a-13 An Improved Transmission Strategy for Multiple Antenna Channels with Partial Feedback
June Chul Roh, Bhaskar Rao, University of California, San Diego

MP8a-14 The Asymptotic Capacity of Multiple-Antenna Rayleigh Fading Channels
Ajith Kamath, Brian Hughes, North Carolina State University

Track 8 - Poster Session

Session MP8b Blind Equalization

Session Chair: *Michael G. Larimore*

MP8b-1 Automatic Delay Selection in Blind Channel Equalization: a Prewhitening + Eigenvector Approach
Roberto Lopez-Valcarce, Fernando Perez-Gonzalez, Universidad de Vigo

MP8b-2 Blind Estimation of Scrambler Offset using Encoder Redundancy
Roland Gautier, Gilles Burel, Jonathan Letessier, Olivier Berder, LEST, University of Brest

MP8b-3 Blind OFDM Channel Estimation through Linear Precoding: A Subspace Approach
Ruifeng Zhang, Drexel University

MP8b-4 A Globally Convergent CMA-Based Approach to Blind Multiuser Detection
Ping Liu, Zhengyuan Xu, University of California, Riverside

MP8b-5 Unified Performance Analysis of Blind Feedforward Timing Estimation
Yan Wang, Erchin Serpedin, Dept. of Electrical Engineering, Texas A&M University
Philippe Ciblat, Ecole Nationale Superieure des Telecommunications

MP8b-6 Optimal Blind Feedforward Carrier Synchronization for General QAM Modulations
Yan Wang, Erchin Serpedin, Department of Electrical Engineering, Texas A&M University
Philippe Ciblat, Ecole Nationale Superieure des Telecommunications

MP8b-7 Joint Blind Timing Synchronization and Channel Estimation for OFDM Systems Using Receiver Diversity
Qi Cheng, Hao Wang, Biao Chen, Syracuse University

MP8b-8 Blind SIMO Channel Estimation for CPM Signals
Shawn Neugebauer, University of California Davis

MP8b-9 A Fractionally-Sampling Based Frequency Offset Enhanced Blind Estimator for Non-Circular Transmissions
Philippe Ciblat, Ecole Nationale Supérieure des Télécommunications
Erchin Serpedin, Yan Wang, Texas A&M University

MP8b-10 On Blind Channel Identifiability Under Space-Time Coded Transmission
Nejib Ammar, University of California Davis

MP8b-11 Blind Equalization for Unitary Space-Time Modulation
Emre Aktas, Ohio State University
Urbashi Mitra, University of Southern California

MP8b-12 A Krylov Subspace Approach to Blind Multiuser Channel Estimation for CDMA Systems
Murat Torlak, Ozgur Ozdemir, University of Texas

MP8b-13 A New Method for Blind Identification of FIR Channels Based Almost Exclusively on Second Order Statistics
Enrique Alameda-Hernández, María del Carmen Carrión, Departamento de Física Aplicada
Desmond C. McLernon, School of Electronic and Electrical Engineering

MP8b-14 Blind Adaptive Channel Identification under Unit-Norm Constraint
Ju Phil Cho, Sok-Kyu Lee, Kyunghi Chang, ETRI
Kyung Seung Ahn, Jeonbuk National Univ.

MP8b-15 Towards Closing The Gap Between MOE and Subspace Methods
Zhengyuan Xu, Ping Liu, University of California, Riverside
Xiaodong Wang, Columbia University

MP8b-16 Blind Channel Tracking for Long Code WCDMA with Linear Interpolation Channel
Lang Tong, Youngchul Sung, Cornell University

Track 1 - Communications

Session TA1 Ultra-Wideband Communications

Session Chair: *Uibashi Mitra*

TA1-1 FSK for Ultrawideband - How Close to Capacity Can We Get? 8:30 AM
Cheng Luo, Muriel Medard, MIT

TA1-2 Problems in Modeling UWB Channels 8:55 AM
Robert A. Scholtz, Joon-Yong Lee, University of Southern California

TA1-3 Hybrid Acquisition of Ultra-Wideband Communication Signals 9:20 AM
Honglei Zhang, Shuangqing Wei, Dennis Goeckel, University of Massachusetts
Moe Win

TA1-4 Design and Implementation Challenges for Very High Speed UWB Systems 9:45 AM
Jeffrey Foerster, Minnie Ho, Sumit Roy, V. Somayazulu, Intel Labs.

BREAK 10:10 AM

TA1-5 Ultra Wideband Time Hopping Systems: Performance and Throughput Enhancement via Frequency Domain Processing 10:30 AM
Carl Nassar, Fang Zhu, Zhiqiang Wu, Colorado State University

TA1-6 A Theoretical Study on the Effects of Interference on UWB Multiple Access Impulse Radio 10:55 AM
Ali Taha, Keith Chugg, Univeristy of Southern California

TA1-7 Optimal Pilot Waveform Assisted Modulation for Ultra-Wideband Communications 11:20 AM
Georgios B. Giannakis, Liuqing Yang, University of Minnesota

TA1-8 Bayesian Detector for TH-SSMA Ultra-Wide Bandwidth Impulse Radio 11:50 AM
Yao-Win Hong, Anna Scaglione, School of Electrical and Computer Engineering, Cornell University

Track 2 - Signal Processing

Session TA2 Geometry and Invariance in Signal Processing

Session Chair: *Steve Smith*

TA2-1 ACE is UMP-Invariant 8:30 AM
Shawn Kraut, Queen's University
Louis Scharf, Colorado State University

TA2-2 Adaptive Detection in Partially Homogeneous Environment: An Invariant Framework. 8:55 AM
Ernesto Conte, Università degli studi di Napoli Federico II

TA2-3 Performance of an Invariant Two-Parameter CFAR Normalizer for Chi-Squared Statistics 9:20 AM
Steven Smith, MIT Lincoln Laboratory

TA2-4 Performance of Space-Time Code Over a Flat-Fading Channel Using a Subspace-Invariant Detector 9:45 AM
Keith Forsythe, MIT Lincoln Laboratory

BREAK 10:10 AM

TA2-5 Use of Wijsman's Representation For Maximal Invariant Densities In Signal Detection Applications 10:30 AM
Joseph Gabriel, Naval Undersea Warfare Center
Steven Kay, University of Rhode Island

TA2-6 On Equivariant Adaptation in Blind Deconvolution 10:55 AM
Scott C. Douglas, Southern Methodist University

TA2-7 Robust Matched Filter Detectors in the Presence of Signal and Interference Magnitude Constraints 11:20 AM
Mukund Desai, Rami Mangoubi, Draper Laboratory

TA2-8 Recent Progress and Applications of Group FFTs 11:55 AM
Daniel Rockmore, Dartmouth College

Track 3 - DSP

Session TA3 Filter Banks and Wavelets

Session Chair: *Truong Nguyen*

TA3-1 Multirate Filter Bank Reconstruction of Bandlimited Signals from Bunched Samples 8:30 AM
Ryan Prendergast, Bernard Levy, Paul Hurst, University of California, Davis

TA3-2 Fast Algorithms for Designing Multirate Cascade Filters — 8:55 AM
David Farden, Debashis Banerjee, North Dakota State University
Brian Berg, Agilent Technoligies Inc.

TA3-3 Subband Decompositions for Hyperspectral Image Analysis — 9:20 AM
Paul S. Hong, Mark J. T. Smith, Georgia Institute of Technology

TA3-4 Quantizer design for Non-Orthogonal Subband Coders — 9:45 AM
Rajeev Gandhi, Motorola Inc.
Sanjit Mitra, University of California, Santa Barbara

BREAK — 10:10 AM

TA3-5 A Partial DFT-Based Modified OFDM System Resistant to Channel Nulls — 10:30 AM
Jie Liang, Trac Tran, The Johns Hopkins University

TA3-6 Optimizations of the WOLA structure for Hearing Aid Applications — 10:55 AM
Robert Brennan, Dspfactory

TA3-7 Integer Low Delay and MDCT Filter Banks — 11:20 AM
Ralf Geiger, Gerald Schuller, Fraunhofer AEMT

TA3-8 Filter Banks for Cyclic-Prefixing the Non-Uniform DMT system — 11:45 AM
Palghat Vaidyanathan, Bojan Vrcelj, California Institute Of Technology

Track 4 - Adaptive Systems

Session TA4 Simulation in Filtering and Stochastic Approximation

Session Chair: *Vikram Kristramunthy*

TA4-1 Averaging Sign Algorithms for Adaptive Filtering — 8:30 AM
George Yin, Cristina Ion, Wayne State University
Vikram Krishnamurthy, University of Melbourne

TA4-2 Recursive Maximum Likelihood Parameter Estimation in Nonlinear Non-Gaussian State Space Models using Particle Filtering — 8:55 AM
Arnaud Doucet, Melbourne University

TA4-3 New Finite Dimensional Filters for Mixed Time-Scale Dynamics — 9:20 AM
William Malcolm, Adelaide University
Robert Elliott, University of Calgary

TA4-4 An MCMC Method for QAM Classification in ISI Channels — 9:45 AM
Thomas Drumright, Zhi Ding, University of California at Davis

BREAK — 10:10 AM

TA4-5 Finite Precision Effects on Performance and Complexity of Particle Filters for Bearings-Only Tracking Problem — 10:30 AM
Miodrag Bolic, Sangjin Hong, Petar Djuric, SUNY at Stony Brook

TA4-6 Spreading Code Adaptation in Multipath Fading CDMA via Discrete Stochastic Optimization — 10:55 AM
Vikram Krishnamurthy, University of Melbourne
Xiadong Wang, Columbia University

TA4-7 An Adaptive Foveal Sensor for Target Tracking — 11:20 AM
Ya Xue, Darryl Morrell, Arizona State University

TA4-8 Performance and Complexity Analysis of Adaptive Particle Filtering for Tracking Applications — 11:45 AM
Sangjin Hong, Miodrag Bolic, Petar Djuric, SUNY at Stony Brook

Track 5 - Array Processing

Session TA5 Emerging Techniques in Array Processing

Session Chair: *Michael Clark*

TA5-1 Generalizing MVDR and MUSIC for Multiple Noncoherent Arrays — 8:20 AM
David W. Rieken, Veridian Systems Division
Daniel R. Fuhrmann, Washington University

TA5-2 A Framework for Robust Spectrum Estimation 8:55 AM
Michael Clark, Mission Research Corp.

TA5-3 A Generalized MVDR Beamformer for Detecting Distributed Signals in the Presence of Interference 9:20 AM
Yuanwei Jin, Ben Friedlander, University of California, Santa Cruz

TA5-4 Robust Capon Beamforming 9:45 AM
Petre Stoica, Uppsala University
Zhisong Wang, Jian Li, University of Florida

BREAK 10:10 AM

TA5-5 A Realizable Mean Square Error Estimator Applied to Rank Selection 10:30 AM
Hanna Witzgall, J. Scott Goldstein, Science Applications International Corporation

TA5-6 Real-Valued IQML for Uniform Linear Arrays 10:55 AM
Todd McWhorter, Mission Research Corporation

TA5-7 Array Processing for NQR 11:20 AM
Yi Jiang, Jian Li, University of Florida
Petre Stoica, Uppsala University
Paul D. Gader, University of Florida

Track 6 - Imaging

Session TA6 Inverse Problems in Imaging

Session Chair: *W. Clem Karl*

TA6-1 Multigrid Inversion Algorithms with Applications to Optical Diffusion Tomography 8:30 AM
Seungseok Oh, Adam Milstein, Charles Bouman, Kevin Webb, Purdue University

TA6-2 Dynamic Object-Based Tomographic Reconstruction 8:55 AM
Yonggang Shi, William Karl, David Castanon, Boston University

TA6-3 Emission Tomography from Compressed List-Mode Data 9:20 AM
Alfred Hero, Thomas Kragh, University of Michigan

TA6-4 Shape Reconstruction from Brightness Functions 9:45 AM
Peyman Milanfar, Amyu Poonawalla, UCSC
Richard Gardner, Western Washington University

BREAK 10:10 AM

TA6-5 Shape From Moments - An Estimation Perspective 10:30 AM
Michael Elad, Gene Golub, Stanford University
Peyman Milanfar, University of California-Santa Cruz

TA6-6 High-Resolution Terrain Elevation Mapping Results From Airborne Cross-Track SAR Stereo 10:55 AM
Charles Jakowatz, David Yocky, Daniel Wahl, Sandia National Laboratories

TA6-7 Mathematical Morphology Applied for Spot Segmentation and Quantification of Gene Microarray Images 11:20 AM
Kashif Siddiqui, Alfred Hero, The University of Michigan, Ann Arbor
Matheen Siddiqui, Boston University

TA6-8 Angular Scatter Imaging in Medical Ultrasound 11:55 AM
William F. Walker, M. Jason McAllister, Univ. of Virginia / Biomedical Engineering

Track 7 - Signal Processing and Communications

Session TA7a Pattern Recognition

Session Chair: *Ralph Hippenstiel*

TA7a-1 A Method for Designing Nonlinear Kernel-Based Discriminant Functions from the Class of Second-Order Criteria. 8:30 AM
Fahed Abdallah, Cédric Richard, Régis Lengelle, Université de Technologie de Troyes (UTT) Laboratoire de modélisation et de sûreté des systèmes (LM2S).

TA7a-2 Adaptive Kernel Least Square Support Vector Machines Applied to Recover DS-CDMA Signals 8:55 AM
Anthony Kuh, Xin Zhao, University of Hawaii

TA7a-3 Automatic Modulation Classification of Radar Signals Using Multi-Class Support Vector Machine Based Classifier 9:20 AM
Qin Jiang, Shubha Kadambe, HRL Laboratories, LLC

TA7a-4 Gaussian Radial Basis Functions and Indexed Families of Functionals 9:45 AM
Irwin Sandberg, University of Texas at Austin

Track 7 - Signal Processing and Communications

Session TA7b Denoising

Session Chair: *Ralph Hippenstiel*

TA7b-1 A Multivariate Shrinkage Function for Wavelet-Based Denoising — 10:30 AM
Levent Sendur, Ivan Selesnick, Polytechnic University

TA7b-2 Signal Denoising in the Co-Domain Using the Kurtosis and Bootstrap Method — 10:55 AM
Hasan Kan, Ralph Hippenstiel, Naval Postgraduate School

TA7b-3 Application of Total Least Squares (TLS) — 11:20 AM
Shane F. Cotter, Bhaskar Rao, UC San Diego

TA7b-4 An Algebraic Integer Based Encoding Scheme for Implementing Daubechies Discrete Wavelet Transform — 11:55 AM
Vassil Dimitrov, University of Calgary

Track 8 - Poster Session

Session TA8a Implementations and Nonlinear Adaptive Algorithms

Session Chair: *Michael G. Larimore*

TA8a-1 Low-Complexity Space-Time Adaptive Multistage Receiver for Asynchronous DS-CDMA Signals
Chia-Chang Hu, Irving S. Reed, University of Southern California

TA8a-2 GPS C/A Code Tracking with Adaptive Beamforming and Jammer Nulling
Seung-Jun Kim, Ronald A. Iltis, University of California, Santa Barbara

TA8a-3 A High-Throughput Pipelined Architecture for Blind Adaptive Equalizer with Minimum Latency
Masashi Mizuno, Kenji Ueda, James Okello, Hiroshi Ochi, Kyushu Institute of Technology

TA8a-4 Reduced Complexity LC-LMS Joint MMSE Equalization and Matched Filter Processing Via Constraint Windowing
Frank Bologna, SPAWAR Systems Center
fred harris, San Diego State University

TA8a-5 An Efficient Implementation for DMT-Based Full-Duplex DSL Modems
Ranjan Sonalkar, L-3 Communication Systems - East
Gary Jin, Zarlink Semiconductor

TA8a-6 A Modular Pipelined Implementation of Large Fast Fourier Transforms
Ayman M. El-Khashab, Earl E. Swartzlander, Jr., The University of Texas at Austin

TA8a-7 Error Bounds for Estimating Bandpassed FM Signals
Richard Scheper, Naval Research Laboratory

TA8a-8 Resolving and Correcting Gain and Phase Mismatch
Ron Porat, Entropic Communications
fred harris, San Diego State University

TA8a-9 FPGA Digital Down Converter IP for Software Defined Radio Terminals
Gianmarco Girau, Maurizio Martina, Andrea Molino, Andrea Terreno, Fabrizio Vacca, Dipartimento di Elettronica - Politecnico di Torino

TA8a-10 Radial Basis Function Neural Networks-based Modelling for Haemodialysis
Monika Ray, Uvais Qidwai, Tulane University

TA8a-11 Architectures and Algorithms for Nonlinear Adaptive Filters
Vikram Hegde, Kenneth Jenkins, Penn State University

TA8a-12 Conjugate-Direction Decomposition Based Fast Stable Parallel Adaptive Algorithm
Wassily Khlebnikov, Soo-Hong Kim, Doh-Hyun Kim, Young-Shin Kwon, LG Innotek Co, Ltd

TA8a-13 Evaluation and Improvement of Two Training Algorithms
Tae Kim, Jiang Li, University of Texas at Arlington

TA8a-14 Optimal Pruning of Feedforward Neural Networks Based upon the Schmidt Procedure
Francisco Javier Maldonado, Williams-Pyro, Inc.
Michael T. Manry, University of Texas at Arlington

TA8a-15 Enhanced Robustness of Multilayer Perceptron Training
Walter H. Delashmit, Lockheed Martin and Fire Control
Michael T. Manry, University of Texas at Arlington

TA8a-16 A Modified Hidden Weight Optimization Algorithm for Feed-forward Neural Networks
Changhua Yu, Michael T. Manry, University of Texas at Arlington

Track 8 - Poster Session

Session TA8b Efficient DSP Hardware

Session Chair: *Vincent Mooney*

TA8b-1 Low Voltage Switched-Current Sigma-Delta Analog-to-Digital Converters Modeling Based on VHDL-AMS
Pawel Sniatala, Rochester Institute of Technology

TA8b-2 Mixed-Signal Micro-Controller for Non-Binary Capacitor Array Calibration in Data Converter
Jianhua Gan, Joel Page, Cirrus Logic
Jacob Abraham, The University of Texas at Austin

TA8b-3 On Synthesizing High Speed DACs by Combining the Outputs of Multiple Low Speed DACs
fred harris, San Diego State University
Pranesh Sinha, TI

TA8b-4 Transmit and Receive Digital Filters Subject to Hardware Cost Constraints
Trevor Fox, University of Calgary

TA8b-5 Hardware Efficient BPSK and QPSK Detection
Amjad Awawadeh, Shyam Sunder Uma Chander, Andoche Kichenaradjou, Michael Soderstrand, Oklahoma State University

TA8b-6 Parameterisable Floating-Point Operations on FPGA
Barry Lee, Neil Burgess, Cardiff University

TA8b-7 Parametric FPGA Early-Late DLL Implementation for a UMTS Receiver
Barbara Cerato, Laura Colazzo, Maurizio Martina, Andrea Molino, Fabrizio Vacca, Dipartimento di Elettronica - Politecnico di Torino

TA8b-8 Silicon Real Time Operating System for Embedded DSPs
Shoab Khan, National University of Sciences and Technology

TA8b-9 Optimal Generation of DSP Architectures from Behavioral Description
Adeel Abbas, Shoab Khan, College of EME, National University of Sciences and Technology

TA8b-10 Potential Speedup Using Decimal Floating-Point Hardware
Mark A. Erle, John M. Linebarger, Michael J. Schulte, Lehigh University

TA8b-11 An ASIC Implementation of Adaptive Arithmetic Coding
Giuseppe Acunto, Miquel Sans, Andreas Burg, Wolfgang Fichtner, IIS, ETH-Zurich

TA8b-12 Approach to the Design of Parity-Checked Arithmetic Circuits
Behrooz Parhami, University of California

TA8b-13 Binomial Logic: Extending Stochastic Computing to High-Bandwidth Signals
Richard Kuehnel, Yakima Training Center

TA8b-14 Lattice Filter Implementation with ETSI Math Operations on the TMS320C62xx
Arumugam Buvaneswari, Mark Haner, Lucent Technologies

TA8b-15 Adaptive Weight Estimation for Interference Nulling on a DSP
Sylvain Alliot, ASTRON

TA8b-16 A Real-Time Embedded Software Implementation of a Turbo Encoder and Soft Output Viterbi Algorithm based Turbo Decoder
Muhammad Sabir, Rashmi Tripathi, Brian Evans, Alan Bovik, The University of Texas at Austin

Track 1 - Communications

Session TP1 Space-Time Communications

Session Chair: *Hamid Jafarkhani*

TP1-1 Optimal Training for Multi-Antenna Time- and Frequency-Selective Fading Channels 1:30 PM
Xiaoli Ma, Liuqing Yang, Georgios Giannakis, University of Minnisota

TP1-2 A Design of Quasi-Orthogonal Space-Time Block Code with Full Diversity 1:55 PM
Weifeng Su, Xiang-Gen Xia, University of Delaware

TP1-3 Space-Time Low Density Parity Check Codes 2:20 PM
P. Meshkat, H. Jafarkhani, UC Irvine

TP1-4 Variable Rate Space-Time Block Codes Based on Power Optimization in M-ary PSK Systems 2:45 PM
Il-Min Kim, Vahid Tarokh, MIT

BREAK 3:10 PM

TP1-5 Capacity-Optimal Training in a Generalized Multiple-Antenna Channel 3:30 PM
Christian Peel, Lee Swindlehurst, Brigham Young University

TP1-6 Distance Spectrum of Space-Time Block Codes: A Union Bound Point of View 3:55 PM
Jifeng Geng, Urbashi Mitra, Madhavan Vajapeyam, EEB-SYS

TP1-7 Towards Optimal Space-Time Coding 4:20 PM
Defne Aktas, Hesham El Gamal, The Ohio State University
Michael P. Fitz, University of California, Los Angeles

TP1-8 Design of Fully-Diverse Multi-Antenna Codes Based on Sp(2) 4:45 PM
Yindi Jing, California Institute of Technology
Babak Hassibi, California Institute of Technology

TP1-9 Diagonally Weighted Orthogonal Space-Time Block Codes 5:10 PM
Girish Ganesan, Stoica Petre, Uppsala University
Erik Larsson, University of Florida

Track 2 - Signal Processing

Session TP2 Communication Networks and Signal Processing

Session Chair: *Brian Sadler & Ananthram Swami*

TP2-1 Power and Rate Control in Wireless Networks 1:30 PM
Yun Li, Anthony Ephremides, University of Maryland

TP2-2 Optimal Detection for MAC in CDMA Ad Hoc Networks 1:55 PM
Lang Tong, Cornell University

TP2-3 Stability and Maximum Stable Throughput of Blind Retransmission Diversity Multiple Access 2:20 PM
Goran Dimic, Nicholas Sidiropoulos, Leandros Tassiulas, University of Maryland

TP2-4 On the Lower Bound of Ad Hoc Networks 2:45 PM
Oghenekome Oteri, Andrea Goldsmith, Stanford University

BREAK 3:10 PM

TP2-5 Distributed Coding for Dense Sensor Networks 3:30 PM
Jim Chou, Dragan Petrovic, Kannan Ramchandran, UC Berkeley

TP2-6 Detection, Tracking and Classification in Sensor Networks using Graphical Models 3:55 PM
Donal McErlean, Shrikanth Narayanan, University of Southern California

TP2-7 A Constrained Joint Optimization Approach to Dynamic Sensor Configuration 4:20 PM
Dana Sinno, Daniel Kreithen, MIT Lincoln Laboratory

TP2-8 Fusion of Decisions Transmitted Over Fading Channels in Wireless Sensor Networks 4:45 PM
Biao Chen, Ruixiang Jiang, Teerasit Kasetkasem, Pramod Varshney, Syracuse University

TP2-9 Discrete Optimization using Decision-Directed Learning for Distributed Networked Computing 5:10 PM
Joel Goodman, Albert Reuther, Robert Bond, Hector Chan, Harold Heggestad, Michael Seibert, MIT Lincoln Laboratory

Track 3 - DSP

Session TP3 Data Hiding

Session Chair: *Charles Boncelet*

TP3-1 Dither-like Data Hiding in Multistage Vector Quantization of MELP and G.729 Speech Coding 1:30 PM
Pao-Chi Chang, National Central University

TP3-2 An Overview of Watermarking: So What's the Big Deal? 1:55 PM
Edward Delp, Purdue University

TP3-3 The N-ary Approximate Message Authentication Code 2:20 PM
Renwei Ge, Mike Wilson, Gonzalo Arce, University of Delaware
Richard F. Graveman, Telcordia Technologies

TP3-4 The Use of Data Hiding to Enhance Error Detection and Correction in MPEG-2 Video 2:45 PM
David Robie, Russell Mersereau, Georgia Tech

BREAK 3:10 PM

TP3-5 Blind Watermarking via Low Frequency Component Modification 3:30 PM
Dimitar Taskovski, Sofija Bogdanova, Momcilo Bogdanov, University Ss. Cyril and Methodius, Faculty of Electrical Engineering

TP3-6 Signal Design for Robust Watermarking on ISI Channels 3:55 PM
Vimal Thilak, Aria Nosratinia, The University of Texas at Dallas

TP3-7 A Wavelet-based Blind and Readable Image Watermarking Algorithm 4:20 PM
Mohamed Yasein, Pan Agathoklis, Electrical & Computer Engineering, University of Victoria

TP3-8 A Survey of Data Remapping and Loop Compiler Optimizations with Slower Memory for Energy-Aware Design 4:45 PM
Vincent Mooney, Krishna Palem, Jun Cheol Park, Georgia Institute of Technology

Track 4 - Adaptive Systems

Session TP4 Adaptive Equalization, Channel Estimation, and Echo Cancelling

Session Chair: *Rick Johnson*

TP4-1 Adaptive Transmission for Infostation Systems: an MC-CDMA implementation 1:30 PM
Christian Ibars, Mizhou Tan, Yeheskel Bar-Ness, New Jersey Institute of Technology

TP4-2 Adaptive Chip-Rate Equalization of Downlink Multirate Wideband CDMA 1:55 PM
Philip Schniter, Adam Margetts, The Ohio State University

TP4-3 MMSE Limitation for Subband Adaptive Equaliser 2:20 PM
Hafizal Mohamad, Stephan Weiss, Lajos Hanzo, University of Southampton

TP4-4 Non Uniformly Spaced Equalizers: A New Approach to Channel Equalization 2:45 PM
Jamal Tuqan, University of California

BREAK 3:10 PM

TP4-5 An Initialization Strategy for Blind Adaptive Decision Feedback Equalizers for Dual-Mode QAM-CAP Reception 3:30 PM
Roland Zukunft, Sven Haar, Fabian Vogelbruch, Munich University of Technology

TP4-6 Adaptive Filterbank Based Blind Channel Estimation for Multicarrier Systems 3:55 PM
Hongbin Li, Stevens Institute of Technology

TP4-7 Blind Channel Identification Robust to Order Overestimation 4:20 PM
Anahid Safavi, ENST, Telecom Paris, TSI Dep.

TP4-8 Algorithmic and Implementation Aspects of Echo Cancellation in Packet Voice Networks 4:45 PM
Krishna Vemireddy, Brendon Slade, LSI Logic

TP4-9 An Improved PNLMS Adaptive Filter For Network Echo Cancellers 5:10 PM
Mehran Nekuii, Mojtaba Atarodi, Sharif University of Technology

Track 5 - Array Processing

Session TP5 Array Processing Foundations

Session Chair: *James Ward*

TP5-1 Application of the L-Curve Technique to Loading Level Determination in Adaptive Beamforming 1:30 PM
John Hiemstra, Matthew Weippert, Scott Goldstein, SAIC, Tim Pratt, Virginia Tech

TP5-2 Normalized Matched Filter-A Low Rank Approach 1:55 PM
Muralidhar Rangaswamy, Air Force Research Laboratory

TP5-3 Superresolution Techniques in Time of Arrival Estimation for Precise Geolocation 2:20 PM
Gary F. Hatke, Patrick Hirschler-Marchand, MIT Lincoln Laboratory

TP5-4 A Novel Model for Reverberant Signals; Robust Maximum Likelihood Localization of Real Signals Based on a Sub-Gaussian Model 2:45 PM
Panayiotis G. Georgiou, Chris Kyriakakis, University of Southern California - Integrated Media Systems Center

BREAK 3:10 PM

TP5-5 Detection-Estimation of More Uncorrelated Gaussian Sources than Sensors in Circular Antenna Arrays — 3:30 PM
Yuri Abramovich, ISRD, DSTO, Nicholas Spencer, CSSIP, Alexei Gorokhov, UCSG, Philips Research Laboratory

TP5-6 Threshold Region Performance of Deterministic Maximum Likelihood DOA Estimation of Multiple Sources — 3:55 PM
Fredrik Athley, Dept. of Signals and Systems, Chalmers University of Technology

TP5-7 Sector Array Mapping: Transformation Matrix Design for Minimum MSE — 4:20 PM
Per Hyberg, Swedish Defence Research Agency FOI Magnus Jansson, Bjorn Ottersten, Dept of Signals, Sensors and Systems

TP5-8 Linearly Constrained Minimum Variance Beamforming in Low-rank Interference — 4:45 PM
Aleksandar Dogandzic, Iowa State University

TP5-9 A Broadband Adaptive Beamformer in Subbands with Scaled Aperture — 5:10 PM
Stephan Weiss, University of Southampton Robert W. Stewart, University of Strathclyde Wei Liu, University of Southampton

Track 6 - Imaging

Session TP6 Internet Video Streaming

Session Chair: *Bernd Girod*

TP6-1 Intoductory Comments — 1:30 PM
Bernd Girod, Stanford University

TP6-2 Video Streaming Using The JVT/H.26L Video Coding Standard — 1:55 PM
Thomas Wiegand, Heinrich-Hertz-Institute

TP6-3 Fast Adaptive Media Scheduling Based on Expected Run-Time Distortion — 2:20 PM
Zhourong Miao, Sony Research Antonio Ortega, University of Southern California

TP6-4 Computing Rate-Distortion Optimized Policies for Hybrid Receiver/Sender Driven Streaming of Multimedia — 2:45 PM
Jacob Chakareski, Bernd Girod, Information Systems Laboratory, Stanford University, Philip A. Chou, Microsoft Corporation

BREAK — 3:10 PM

TP6-5 Rate-Distortion Optimized Low-Latency Video Streaming — 3:30 PM
Yi Liang, Bernd Girod, Stanford University John Apostolopoulos, Hewlett-Packard Laboratories

TP6-6 Quality Monitoring of Video Over the Internet — 3:55 PM
Amy Reibman, AT&T Labs - Research

TP6-7 Turbo-Coded Transmission of Smoothed H.263 Video for the cdma2000 Downlink — 4:20 PM
Cyril-Daniel Iskander, P. Takis Mathiopoulos, University of British Columbia

TP6-8 Functionalities and Costs of Scalable Video Coding for Streaming Services — 4:45 PM
Matthias Narroschke, University of Hannover

TP6-9 Two-Step Optimization of 3-D Wavelet Video Streaming over Lossy Networks — 5:10 PM
Jianyu Dong, Yuan Zheng, The Ohio State University

Track 7 - Signal Processing and Communications

Session TP7 Optimization of MIMO Channel Capacity and Space-Time Coding

Session Chair: *Michael Zatman*

TP7-1 Space-Time Turbo Codes: Experimental Performance Results — 1:30 PM
Dan Bliss, Peter Wu, MIT Lincoln Laboratory

TP7-2 OFDM MIMO Performance with Maximum Likelihood and Dynamically Grouped LST Receivers — 1:55 PM
Joseph Liberti, Anthony Triolo, John Koshy, Telcordia Technologies

TP7-3 Statistical Characterization of the Indoor MIMO Channel Based on LOS/NLOS Measurements — 2:20 PM
Thomas Svantesson, Jon Wallace, Brigham Young University

TP7-4 Space-Time Block Codes For Eight Transmit Antennas — 2:45 PM
Yasir Ahmed, Michael Buehrer, Jeffrey Reed, Mobile and Portable Radio Research Group

BREAK — 3:10 PM

TP7-5 Experimental Underwater Acoustic MIMO Channel Capacity Measurements — 3:30 PM
Michael Zatman, Brian Tracey, MIT Lincoln Laboratory

TP7-6 Soft vs. Hard Antenna Selection Based on Minimum Distance for MIMO Systems — 3:55 PM
Ludovic Collin, IRENav, Ecole Navale
Olivier Berder, Philippe Rostaing, Gilles Burel, LEST, University of Brest

TP7-7 Space-Time Spreading Codes for a Multiuser MIMO System — 4:20 PM
Roya Doostnejad, Teng Joon Lim, Elvino Sousa, University of Toronto

TP7-8 Trace Balancing for Multiuser MIMO Downlink Transmission — 4:45 PM
Holger Boche, Martin Schubert, Eduard Jorswieck, Heinrich-Hertz-Institut

TP7-9 Capacity and Downlink Transmission Algorithms for a Multi-user MIMO Channel — 5:10 PM
Quentin Spencer, Martin Haardt, Ilmenau University of Technology

Track 8 - Poster Session

Session TP8a Imaging for Target Detection

Session Chair: *Sally Wood*

TP8a-1 Multiple-Bounce Echo Extraction in SAR Image Formation — 1:30 PM
David Garren, Scott Goldstein, SAIC
Jan North, SAF/ST

TP8a-2 Bayesian Approach to Phase-Difference Based Phase Unwrapping — 1:55 PM
Antonio Pauciullo, Gianfranco Fornaro, Eugenio Sansosti, Irea-CNR

TP8a-3 Bit-Plane Compression of High Dynamic Range SAR Imagery — 2:20 PM
Robert Ives, US Naval Academy

TP8a-4 Adaptive Radar Detection of Extended Targets via Signature Diversity — 2:45 PM
Francesco Bandiera, Giuseppe Ricci, Manlio Tesauro, Dip. di Ingegneria dell'Innovazione, Università di Lecce

BREAK — 3:10 PM

TP8a-5 Clutter metrics for ATR — 3:30 PM
Dmitri Bitouk, Michael Miller, Johns Hopkins University
Laurent Younes, Ecole Normale Superieure de Cachan

TP8a-6 Feature Based Track-Before-Detection Algorithm for Real-Time Buried Seabottom Target Detection — 3:55 PM
Te-Chih Liu, Henrik Schmidt, Mass. Inst. of Technology

TP8a-7 Clustering and Unsupervised Classification of Remotely Sensed Data: Principal Component Approach — 4:20 PM
Andrzej Brodzik, The MITRE Corporation

TP8a-8 A Digital ASIC for Synthesizing False Target Radar Images — 4:45 PM
Douglas Fouts, Phillip Pace, U.S. Naval Postgraduate School, Christopher Karow, German Navy
Stig Ekestorm, Swedish Army

Track 8 - Poster Session

Session TP8b CDMA

Session Chair:

TP8b-1 Blind Multiuser Detection for MC-CDMA Systems
Donatella Darsena, Giacinto Gelli, Luigi Paura, Francesco Verde, Universita' degli Studi Federico II di Napoli

TP8b-2 Sage-Based Multiuser Detection For Multirate Ds/Cdma Systems
Roberto Episcopo, D.I.E.T., University of Naples "Federico II", Antonio De Maio, D.I.E.T., University of Naples

TP8b-3 Orthogonal Sequence Sets for Multipath CDMA Channels with a Small Delay Spread
Slawomir Stanczak, Heinrich-Hertz-Institut fuer Nachrichtentechnik

TP8b-4 On the Design of Optimal Spreading Sequences for CDMA Systems
Thomas Strohmer, University of California, Davis
Robert Heath, The University of Texas at Austin

TP8b-5 Performance of Iterative CDMA Receivers with Channel Estimation in Multipath Environments
Joachim Wehinger, Ralf Müller, Maja Loncar, Christoph Mecklenbräuker, Forschungszentrum Telekommunikation Wien

TP8b-6 Novel Orthogonal Codes for MC-CDMA with Low Crosscorrelation in Frequency Selective Fading Channels
Zhiqiang Wu, Carl Nassar, Colorado State University

TP8b-7 Near-far Resistance of Multicarrier CDMA Systems
Xiaodong Yue, Howard Fan, University of Cincinnati

TP8b-8 Channel Estimation and Multiuser Detection for Long Code CDMA
Ping Liu, Zhengyuan Xu, University of California - Riverside

TP8b-9 Ergodic Capacities for Downlink of MC-CDMA System with Different Detection and Resource Allocation Strategies

Jianming Zhu, New Jersey Institute of Technology

TP8b-10 Digital DS-CDMA Receivers Working Below the Chip Rate
Irena Maravic, Martin Vetterli, Swiss Federal Institute of Technology, Lausanne

TP8b-11 Iterative Constrained Penalized Likelihood Estimation of Parameters for CDMA
Ejaz Khan, Institut Eurecom

TP8b-12 CDMA Sparse Channel Estimation Using a GSIC/AM Algorithm for Radiolocation
Sunwoo Kim, Timothy Pal, Sunwoo Kim, Hua Lee, UCSB

TP8b-13 Blind Multiuser Detection over Highly-Dispersive CDMA Channels in Presence of Diversity Reception
Francesco Bandiera, Giuseppe Ricci, Dip. Ingegneria dell'Innovazione, Università di Lecce
Mahesh Varanasi, ECE Dept., University of Colorado

TP8b-14 A GLR-based Group Detection Strategy for Synchronous CDMA Systems over Frequency-Selective Fading Channels
Francesco Bandiera, Giuseppe Ricci, Dip. di Ingegneria dell'Innovazione, Università di Lecce

TP8b-15 Iterative Soft Decision Interference Cancellation Receivers for DS-CDMA Downlink Employing 4QAM and 16QAM
Jürgen F. Rößler, Johannes B. Huber, Chair of Information Transmission , University Erlangen-Nuremberg

TP8b-16 CDMA-Synchronization: Multi-user Performance at Single-user Complexity
Patrik Bohlin, Dept. of Signals & Systems

Track 1 - Communications

Session WA1 Wireless Communications and Networks

Session Chair: *Andrea Goldsmith*

WA1-1 Adaptive Coding for PSAM Without Feedback 8:30 AM
Ibrahim Abou-Faycal, Muriel Medard, MIT

WA1-2 Switching Under Energy Constraints 8:55 AM
Balaji Prabhakar, Stanford University

WA1-3 Space Time Communication for OFDM over Wideband Wireless Channels: An Information Theoretic Perspective 9:20 AM
Upamanyu Madhow, Gwen Barriac, U.C. Santa Barbara

WA1-4 Sum Power Iterative Water Filling for Vector Broadcast Channels 9:45 AM
Andrea Goldsmith, Nihar Jindal, Syed Jafar, Sriram Vishwanath, Stanford University

BREAK 10:10 AM

WA1-5 Location Estimation Accuracy in Wireless Sensor Networks 10:30 AM
Neal Patwari, Alfred Hero, University of Michigan

WA1-6 Multiple Antennas from a Combined Networking and Physical Layer 10:55 AM
Ada Poon, David Tse , Robert Brodersen, University of California, Berkeley

WA1-7 On the Power Efficiency of Sensory and Ad-Hoc Wireless Networks 11:20 AM
Babak Hassibi, Amir Dana, California Institute of Technology

WA1-8 Capacity of Ad Hoc Wireless Networks with Retransmission Diversity 11:45 AM
Yi Sun, The City College of City University of New York

WA1-9 Computation of Core Capacity of Wireless Ad Hoc Networks 12:10 PM
Volkan Rodoplu, Teresa Meng, Stanford University

Track 2 - Signal Processing

Session WA2 Time-Frequency Distributions for Nonstationary Random Processes

Session Chair: *Alfred Hanssen*

WA2-1 Spectral Analysis and Harmonizable Processes 8:30 AM
Keh-Shin Lii, University of California Riverside
Murray Rosenblatt, University of California San Diego

WA2-2 Some Considerations for Characterization of Non-Stationary Random Processes 8:55 AM
Charles W. Therrien, Naval Postgraduate School

WA2-3 Robust Bispectra for Nonstationary Data 9:20 AM
David J. Thomson, Queen's University

WA2-4 Representation and Estimation Problems for Harmonizable Type Processes 9:45 AM
Malempati Rao, University of California Riverside

BREAK 10:10 AM

WA2-5 Reducing Interference in Stochastic Time-Frequency Analysis without Losing Information 10:30 AM
Peter Schreier, University of Colorado
Louis Scharf, Colorado State University

WA2-6 Uncertainty and Concentration Inequalities for Nonstationary Random Processes and Time-Frequency Energy Spectra 10:55 AM
Gerald Matz, Vienna University of Technology

WA2-7 Generalized Lamperti Transformation of Broken Scale Invariance 11:20 AM
Pierre Borgnat, Patrick Flandrin, ENS Lyon, Laboratoire de Physique
Pierre-Olivier Amblard, Laboratoire des Images et Signaux

WA2-8 On the Sampling of Generalized Almost-Cyclostationary Signals 11:45 AM
Luciano Izzo, Universita' di Napoli Federico II
Antonio Napolitano, Universita' di Napoli Federico II

WA2-9 Polyspectra for Harmonizable Stochastic Processes 12:10 PM
Alfred Hanssen, University of Tromso
Louis Scharf, Colorado State University

Track 3 - DSP

Session WA3 Arithmetic and Hardware Implementations

Session Chair: *fred harris*

WA3-1 Defining Canonical-Signed-Digit Number Systems as Arithmetic Codes 8:30 AM
Linda DeBrunner, Victor DeBrunner, University of Oklahoma, Jeffrey Coleman, Naval Research Laboratory

WA3-2 Reducing the Latency of Division Operations with Partial Caching 8:55 AM
Edward G. Benowitz, Milos D. Ercegovac, University of California, Los Angeles
Farzan Fallah, Fujitsu Laboratories of America, Inc.

WA3-3 Novel Forward and Inverse PRNS Converters of Reduced Computational Complexity 9:20 AM
Vassilis Paliouras, University of Patras
Alexander Skavantzos, Louisiana State University

WA3-4 A New Scheme for Table-Based Evaluation of Functions 9:45 AM
David Defour, Florent de Dinechin, Jean-Michel Muller, Arnaud Tisserand, LIP, ENS-Lyon

BREAK 10:10 AM

WA3-5 A Coarse-Grained FPGA Architecture for Reconfigurable Baseband Modulator/Demodulator 10:30 AM
Wei Wu, Shu-Shin Chin, Sangjin Hong, SUNY at Stony Brook

WA3-6 A (4:2) Adder for Unified GF(p) and GF(2**n) Galois Field Multipliers 10:55 AM
Lai-Sze Au, Neil Burgess, Cardiff University

WA3-7 Hybrid EMODL Ling Addition 11:20 AM
Johannes Grad, James Stine, Illinois Institute of Technology

WA3-8 Weighted Bit-Set Encodings for Redundant Digit Sets: Theory and Applications 11:45 AM
Jaberipur Ghassem, Mohammad Ghodsi, Sharif Univ. of Technology
Behrooz Parhami, University of California-Santa Barbara

Track 4 - Adaptive Systems

Session WA4 Adaptive Source Separation

Session Chair: *Scott Douglas*

WA4-1 Blind Channel Estimation for Space-Time Coded Wideband CDMA — 8:30 AM
Lang Tong, Youngchul Sung, Cornell University
Ananthram Swami, temp

WA4-2 An EM Based Semi-Blind Channel Estimation Algorithm Designed for OFDM Systems — 8:55 AM
Marc de Courville, Laurent Mazet, Veronique Buzenac-Settineri, Motorola Labs
Pierre Duhamel, Laboratoire des Signaux et Systemes, Supelec

WA4-3 Blind Multiuser Receiver for Space-Time Coded CDMA Signals in Frequency-Selective Channels — 9:20 AM
Jinghong Ma, Jitendra K. Tugnait, Auburn University

WA4-4 On Frequency-Domain Implementations of Filtered-Gradient Blind Deconvolution Algorithms — 9:45 AM
Marcel Joho, Phonak Inc.
Phil Schniter, Ohio State University

BREAK — 10:10 AM

WA4-5 Simple Adaptive Algorithms for Blind Source Separation of Noisy Mixtures — 10:30 AM
Scott C. Douglas, Southern Methodist University

WA4-6 Blind Separation of Signal and Reverberation by Minimizing the Circular Variance of the Phase — 10:55 AM
Ivars Kirsteins, Naval Undersea Warfare Center

WA4-7 EMVA-Based Blind Maximum Likelihood Separation of Cross-Polar Interference in Dual Polarized Digital Transmission — 11:20 AM
Hoang Nguyen, Bernard C. Levy, ECE Department, Univ. of California—Davis

WA4-8 Study on the Performance of Diversity and Adaptive Combining Techniques and their Combination with the ECFCM Model, — 11:45 AM
Suk Won Kim, Dong Sam Ha, and Jeffrey H. Reed, Virginia Tech

WA4-9 A Multistage Interference Rejection System for GPS — 12:10 AM
Richard E. Cagley, Suk-Seung Hwang, John J. Shynk, University of California

Track 5 - Array Processing

Session WA5 Antenna Arrays and MIMO Systems

Session Chair: *Michael Zoltowski*

WA5-1 Array Beamforming for Slow FH Spread-Spectrum WLANs — 8:30 AM
Ronald Iltis, University of California

WA5-2 Space-Time Equalization and Interference Cancellation for MIMO OFDM — 8:55 AM
Michael Zoltowski, Bradley Breinholt, Purdue University
Timothy Thomas, Motorola Labs

WA5-3 A Feedback-Based Adaptive Multi-Input Multi-Output Signaling Scheme — 9:20 AM
Eko Onggosanusi, Anand Dabak, Mobile Wireless Branch, DSPS R&D Center Texas Instruments Inc.

WA5-4 MISO Antenna Array OC Pre-RAKE Transmitter with MRC Post-RAKE Receiver — 9:45 AM
Joseph P. Burke, Qualcomm, Inc.
Bhaskar D. Rao, James R. Zeidler, University of California, San Diego

BREAK — 10:10 AM

WA5-5 Improved MIMO Transmit Weights for Equal-Rate Data Streams — 10:30 AM
Timothy Thomas, Frederick Vook, Motorola Labs

WA5-6 Blind Channel Equalization in a Multiuser OFDM Communications System — 10:55 AM
Sarod Yatawatta, Athina Petropulu, Drexel University

WA5-7 Space-Time Complex-Field Layered Coding for Time-Selective Fading Channels — 11:20 AM
Xiaoli Ma, Lu, Giannakis, University of Minnesota

WA5-8 Orthogonalized Spatial Multiplexing for MIMO WCDMA Downlink over Frequency-Selective Rayleigh Fading Channels — 11:45 AM
Djordje Tujkovic, Emiliano Sottani, University of Oulu, Centre for Wireless Communications (CWC)

WA5-9 An Efficient Multiuser Access Scheme Combining the Transmit Diversity with the Modified SVD Methods for MIMO Channels — 12:10 PM
Kyungseok Kim, ETRI

Track 6 - Imaging

Session WA6 Still Image Compression

Session Chair: *Roberto Manduchi*

WA6-1 Geometric Tools for Image Compression 8:30 AM
Michael Wakin, Justin Romberg, Hyeokho Choi, Richard Baraniuk, Dept. of ECE, Rice University

WA6-2 Quantifying The Intra And Inter Subband Correlations In The Zero-Tree-Based Wavelet Image Coders 8:55 AM
Zhen Liu, Lina Karam, Arizona State University

WA6-3 Blind Quality Assessment for JPEG2000 Compressed Images 9:20 AM
Hamid Sheikh, Zhou Wang, Lawrence Cormack, Alan Bovik, The University of Texas at Austin

WA6-4 Hyperspectral Image Restoration and Coding 9:45 AM
Anand Venkatachalam, Michael Larsen, Tamal Bose, Utah State University

BREAK 10:10 AM

WA6-5 Wavelet Filter Selection by Clustering of Image Measures 10:30 AM
Naushirwan Patuck, School of Electronic and Electrical Engineering, University of Leeds

WA6-6 A New Wavelet Based Deblocking Algorithm for Compressed Images 10:55 AM
Feng Gao, Xiaokun Li, William Wee, University of Cincinnati

WA6-7 Multimedia SoC: a Systolic Core for Embedded DCT Evaluation 11:20 AM
Francesco Cariccia, Paolo Cariccia, Maurizio Martina, Andrea Molino, Fabrizio Vacca, Dipartimento di Elettronica - Politecnico di Torino

Track 7 - Signal Processing and Communications

Session WA7 Estimation

Session Chair: *Darryl Morrell*

WA7-1 Use of Nonparametric Tolerance Intervals for Effective Bootstrap Estimation 8:30 AM
Ashwin Sarma, Naval Undersea Warfare Center
Donald Tufts, University of Rhode Island

WA7-2 Accuracy of the Estimator of Gaussian Autoregressive Process 8:55 AM
Jeong-Jin Lee, George H. Freeman, University of Waterloo

WA7-3 Analytical Expression for the Posterior Distribution of Signals in Colored Gaussian Noise 9:20 AM
Lennart Svensson, Magnus Lundberg, Dept. of Signals and Systems

WA7-4 A Globally Convergent Superlinear Algorithm for Linear MAP Estimation with Independent Non-Gaussian Sources and Noise 9:45 AM
Jason Palmer, Kenneth Kreutz-Delgado, UCSD, ECE Department

BREAK 10:10 AM

WA7-5 Covariance Shaping Approach to Linear Least-Squares Estimation 10:30 AM
Yonina C. Eldar, Massachusetts Institute of Technology

WA7-6 Estimation of Structured Persymmetric Covariance Matrices 10:55 AM
Antonio De Maio, Università degli studi di Napoli Federico II

WA7-7 Least Squares Optimal Filtering with Multirate Observations 11:20 AM
Charles W. Therrien, Anthony H. Hawes, Naval Postgraduate School

WA7-8 Robust Least-Squares Estimators Based on Semidefinite Programming 11:45 AM
Joachim Dahl, Bernard Fleury, Aalborg University, CPK
Lieven Vandenberghe, UCLA, Electrical Engineering Department

WA7-9 Comparison of IMM and Robust Filters in Impulsive Noise Environments 12:10 PM
David Bizup, Maite Brandt-Pearce, University of Virginia

Track 8 - Poster Session

Session WA8a OFDM

Session Chair: *Sally Wood*

WA8a-1 Low-Complexity Detection of OFDM in Time- and Frequency-Selective Fading Channels
Philip Schniter, Siddharth D'Silva, The Ohio State University

WA8a-2 Multicarrier Modulation with Data Dependent Frequency Domain Redundancy
Arthur Redfern, Texas Instruments

WA8a-3 Capacity Improvement for Uplink OFDMA
Ufuk Tureli, Stevens Institute of Technology

WA8a-4 Low Complexity Multipath Diversity Through Fractional Sampling in OFDM
Cihan Tepedelenlioglu, Ravikanth Challagulla, Arizona State University

WA8a-5 Capacity and Throughput Comparison of Receiver Schemes for OFDMA Uplink
Zhongren Cao, Ufuk Tureli, Yu-Dong Yao, Stevens Institute of Technology

WA8a-6 Low-Complexity ICI Suppression for OFDM Over Time- and Frequency-Selective Rayleigh Fading Channels
Xiaodong Cai, Georgios B. Giannakis, University of Minnesota

WA8a-7 On the Optimal Metrics for Coarse Frame and Carrier Synchronization in OFDM Systems
Kai Shi, Erchin Serpedin, Texas A&M University
Philippe Ciblat, Ecole National Superieure des Telecommunications

WA8a-8 Joint Equalization and Interference Suppression in OFDM Systems
Donatella Darsena, Giacinto Gelli, Luigi Paura, Francesco Verde, Università degli studi Federico II di Napoli

WA8a-9 Time Domain Phase Noise Correction for OFDM Signals
Stephen Biracree, Raul Casas, Andrew Youtz, NxtWave Communications, Inc

WA8a-10 User Separation, Frequency and Timing Synchronization On Uplink of OFDMA Systems
Zhongren Cao, Ufuk Tureli, Yu-Dong Yao, Stevens Institute of Technology

WA8a-11 PAR Reduction for DMT Systems with Unloaded Subchannels
Alan Gatherer, Michael Polley, Arthur Redfern, Texas Instruments

WA8a-12 Performance of Clustered OFDM with Low Density Parity Check Codes over Dispersive Channels
Huaning Niu, Manyuan Shen, James Ritcey, Hui Liu, University of Washington

WA8a-13 Joint Channel Estimation and Data Detection Algorithms for MIMO-OFDM Systems
Kyeong Jin Kim, Nokia Research Center

WA8a-14 Performance of A Space-Time Block Coded OFDM System
Jiang Yue, Jerry Gibson, Southern Methodist University

WA8a-15 Differential Space-Time-Frequency Coding for MIMO OFDM systems
Jibing Wang, Kung Yao, UCLA

Track 8 - Poster Session

Session WA8b Communications II

Session Chair:

WA8b-1 An End to End, Real Time, Cdpd Wireless Video Coding and Transmission System
Zhen Liu, Lina Karam, Arizona State University

WA8b-2 Performance Analysis of an Enhanced Nonlinear SIC Receiver for the IS-95 Downlink
Richard E. Cagley, John J. Shynk, University of California
Richard P. Gooch, Applied Signal Technology, Inc.

WA8b-3 Suboptimal Symbol-by-Symbol Demodulation of Continuous Phase Modulated Signals using Laurent Decomposition
Heon Huh, James V. Krogmeier, Purdue University

WA8b-4 Modulation Classification in Fading Multipath Channel
Visa Koivunen, Signal Processing Laboratory
Juha Venäläinen, Signal Processing/Helsinki Univ. of Technology
Liisa Terho, PVTeknTL

WA8b-5 Multichannel ADSL Time Domain Equalizer Design
Milos Milosevic, Brian L. Evans, The University of Texas at Austin
Lucio F. C. Pessoa, Motorola

WA8b-6 A Non-synchronized Sampling Scheme
Jaekwon Kim, Edward J. Powers, Univ. of Texas at Austin
Yongsoo Cho, Chung-Ang Univ.

WA8b-7 A Semi-Blind EMVA for Maximum Likelihood Equalization of GMSK Signal in ISI Fading Channels
Hoang Nguyen, Bernard C. Levy,
Univ. of California, Davis

WA8b-8 Iterative Algorithm for Finding Optimal Resource Allocation in Symbol-Asynchronous CDMA Channels with Different SIR Requirements
Holger Boche, Heinrich-Hertz-Institut

WA8b-9 Multitype Interference Suppression in Multiuser Fast Fading DSSS Wireless Channels
Hao Shen, Arizona State University
Antonia Papandreou-Suppappola, Arizona State University

WA8b-10 Low Complexity Polynomial Receivers for Downlink CDMA
Walid Hachem, Ecole Supérieure d'Electricité (SUPELEC)

WA8b-11 Symbol Timing Estimation in Ultra Wideband Communications
Zhi Tian, Michigan Technological University

WA8b-12 A Transparent Repeater for Digital Communication Signals
Benjamin Friedlander, Department of Electrical Engineering
Eli Pasternak, Bridgewave Communications

WA8b-13 Viterbi Decoder Architecture for Interleaved Convolutional Code
Jun Jin Kong, Keshab K. Parhi, University of Minnesota

WA8b-14 Precoded Iterative Equalization for ARQ Systems
Harvind Samra, Zhi Ding, University of California, Davis

WA8b-15 16-QAM Turbo Equalization based on Minimum Mean Squared Error Linear Equalization
Fabian Vogelbruch, Roland Zukunft, Sven Haar,
Munich University of Technology

WA8b-16 Multiuser Interference Mitigation with Multistage Detectors: Design and Analysis for Unequal Powers
Laura Cottatellucci, Ralf R. Müller,
Telecommunications Research Center Vienna (ftw.)

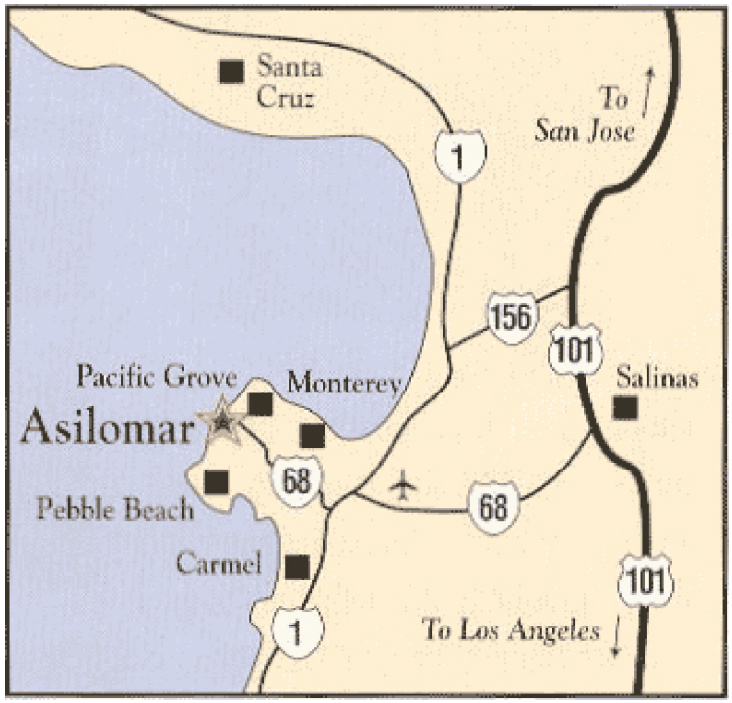
Author List

NAME	SESSION
Cioffi, John	MP4-5
Clark, Michael	TA5-2
Coates, Mark	MA2b-3
Colazzo, Laura	TA8b-7
Coleman, Jeffrey	MP3-5
Coleman, Jeffrey	WA3-1
Collin, Ludovic	TP7-6
Conte, Ernesto	TA2-2
Cormack, Lawrence	WA6-3
Corregan, Kameron	MP5-1
Costello, Daniel	MA1b-4
Cottatellucci, Laura	WA8b-16
Cotter, Shane F.	TA7b-3
Cox, Henry	MP5-5
Cuypers, Gert	MP4-4
Dabak, Anand	WA5-3
Daecke, Dirk	MP4-9
Dahl, Joachim	WA7-8
Damera-Venkata, Niranjan	MP3-7
Dana, Amir	WA1-7
Dane, Gokce	MP3-4
Darsena, Donatella	TP8b-1
Darsena, Donatella	WA8a-8
Dasgupta, Soura	MA4b-1
de Courville, Marc	WA4-2
de Dinechin, Florent	WA3-4
De Maio, Antonio	TP8b-2
De Maio, Antonio	WA7-6
DeBrunner, Linda	MP3-6
DeBrunner, Linda	WA3-1
DeBrunner, Victor	MP3-3
DeBrunner, Victor	MP3-6
DeBrunner, Victor	WA3-1
Defour, David	WA3-4
Delashmit, Walter H.	TA8a-15
Delp, Edward	TP3-2
Desai, Mukund	TA2-7
Dillard, George M.	MA7b-4
Dimic, Goran	TP2-3
Dimitrov, Vassil	TA7b-4
Ding, Zhi	TA4-4
Ding, Zhi	WA8b-14
Djuric, Petar	TA4-5
Djuric, Petar	TA4-8
Do, Minh	MP6-9
Dogandzic, Aleksandar	TP5-8
Dong, Jianyu	TP6-9
Doostnejad, Roya	TP7-7
Doucet, Arnaud	TA4-2
Douglas, Scott C.	TA2-6
Douglas, Scott C.	WA4-5
Drumright, Thomas	TA4-4
D'Silva, Siddharth	WA8a-1
Duhamel, Pierre	WA4-2
Effros, Michelle	MP1-6
Ekestorm, Stig	TP8a-8
El Gamal, Hesham	TP1-7
Elad, Michael	MP6-6
Elad, Michael	TA6-5
Eldar, Yonina C.	WA7-5
El-Khashab, Ayman M.	TA8a-6
Elliott, Robert	TA4-3
Emamian, Vahid	MA5b-5
Ephremides, Anthony	TP2-1
Episcopo, Roberto	TP8b-2
Ercegovac, Milos D.	WA3-2
Erkip, Elza	MP7-7
Erle, Mark A.	TA8b-10
Evans, Brian	MP3-7
Evans, Brian	MP4-3
Evans, Brian	TA8b-16
Evans, Brian L.	WA8b-5
Fallah, Farzan	WA3-2
Fan, Howard	TP8b-7
Farden, David	TA3-2
Feng, Xiaoguang	MP6-5
Fichtner, Wolfgang	TA8b-11
Fimoff, Mark	MP8a-3
Fitz, Michael P.	MP8a-4
Fitz, Michael P.	TP1-7
Flandrin, Patrick	WA2-7
Fleury, Bernard	WA7-8
Flynn, John	MP5-9
Foerster, Jeffrey	TA1-4
Fornaro, Gianfranco	TP8a-2
Forsythe, Keith	TA2-4
Fossorier, Marc	MA1b-3
Fossorier, Marc	MP1-9
Fouts, Douglas	TP8a-8
Fox, Trevor	TA8b-4
Fox, Warren	MP5-9
Freeman, George H.	WA7-2
Frenkil, Jerry	MA3b-3
Friedlander, Ben	TA5-3
Friedlander, Benjamin	MP8a-8
Friedlander, Benjamin	WA8b-12
Fuhrmann, Daniel R.	MP2b-2
Fuhrmann, Daniel R.	TA5-1
Gabriel, Joseph	TA2-5
Gader, Paul D.	TA5-7
Gan, Jianhua	TA8b-2
Gandhi, Rajeev	TA3-4
Ganesan, Girish	TP1-9
Gao, Feng	WA6-6
garcia-frias, javier	MP1-5
Gardner, Richard	TA6-4
Garren, David	TP8a-1
Gatherer, Alan	WA8a-11
Gautier, Roland	MP8b-2
Ge, Renwei	TP3-3
Geiger, Ralf	TA3-7
Gelli, Giacinto	TP8b-1
Gelli, Giacinto	WA8a-8
Geng, Jifeng	TP1-6
Georgiou, Panayiotis G.	TP5-4
Ghassem, Jaberipur	WA3-8
Ghodsi, Mohammad	WA3-8
Giannakis, Georgios	TP1-1
Giannakis, Georgios B.	TA1-7
Giannakis, Georgios B.	WA8a-6
Giannakis, Georgios B.	WA5-7
Gibson, Jerry	MP8a-1
Gibson, Jerry	WA8a-14
Girau, Gianmarco	TA8a-9
Girod, Bernd	MP1-3
Girod, Bernd	TP6-4
Girod, Bernd	TP6-5
Goeckel, Dennis	TA1-3
Goldsmith, Andrea	TP2-4
Goldsmith, Andrea	WA1-4
Goldstein, J. Scott	TA5-5
Goldstein, Scott	TP5-1
Goldstein, Scott	TP8a-1
Golub, Gene	TA6-5
Gomes, Bruce	MP5-1
Gooch, Richard P.	WA8b-2
Goodman, Joel	TP2-9
Gore, Dhananjay	MP7-1
Gorokhov, Alexei	MP7-1
Gorokhov, Alexei	TP5-5
Grad, Johannes	WA3-7
Graveman, Richard F.	TP3-3
Gray, Robert M.	MA6b-1
Greenbaum, Gary	TP6-1
Greene, Robert	MP5-3
Greene, Robert	MP5-4
Grigoryan, Artyom	MA7b-2
Guillen i Fabregas, Albert	MP2a-1
Ha, Victor Hyeong-Seok	MA6b-3
Haar, Sven	MP4-9
Haar, Sven	TP4-5
Haar, Sven	WA8b-15
Haardt, Martin	TP7-9
Hachem, Walid	WA8b-10
Hagenauer, Joachim	MP2a-3
Haner, Mark	TA8b-14
Hanssen, Alfred	WA2-9
Hanzo, Lajos	TP4-3
harris, fred	TA8a-4
harris, fred	TA8a-8
harris, fred	TA8b-3
Hassibi, Babak	MA7b-5
Hassibi, Babak	MP2a-4
Hassibi, Babak	TP1-8
Hassibi, Babak	WA1-7
Hatke, Gary F.	TP5-3
Hawes, Anthony H.	WA7-7
Heath, Robert	MP7-6
Heath, Robert	MP8a-6
Heath, Robert	TP8b-4
Hebenstreit, Gerald	MP5-3
Hedayat, Ahmadreza	MA1b-5
Hegde, Vikram	TA8a-11
Heggestad, Harold	TP2-9
Hemami, Seila S.	MP1-2
Hero, Alfred	MA6b-2
Hero, Alfred	MP2b-1
Hero, Alfred	TA6-3
Hero, Alfred	TA6-7
Hero, Alfred	WA1-5
Hiemstra, John	TP5-1
Hillery, William	MP8a-3
Hilmes, Philip	MA8b-2
Hippenstiel, Ralph	TA7b-2
Hirschler-Marchand, Patrick	TP5-3
Hlawatsch, Franz	MP2a-2
Ho, Minnie	TA1-4
Hong, Paul S.	TA3-3
Hong, Sangjin	TA4-5
Hong, Sangjin	TA4-8
Hong, Sangjin	WA3-5
Hong, Yao-Win	TA1-8
Hu, Chia-Chang	TA8a-1
Hu, Xiaojuan	MP3-6
Huang, Yuheng	MA5b-1
Huber, Johannes B.	TP8b-15
Hughes, Brain	MP7-2
Hughes, Brian	MP8a-14
Huh, Heon	WA8b-3
Hunter, Todd	MA5b-4
Hurst, Paul	TA3-1
Hwang, Suk-Seung	WA4-9
Hyberg, Per	TP5-7
Ibars, Christian	TP4-1
Iltis, Ronald	WA5-1
Iltis, Ronald A.	TA8a-2
Ion, Cristina	TA4-1
Iskander, Cyril-Daniel	TP6-7
Ives, Robert	TP8a-3
Izzo, Luciano	WA2-8
Jafar, Syed	WA1-4
Jafarkhani, H.	TP1-3
Jagannathan, Anupama	MP6-7
Jaggi, Sidharth	MP1-6
Jakowatz, Charles	TA6-6
Jansson, Magnus	TP5-7
Jenkins, Kenneth	TA8a-11
Jia, Wenhui	MA8b-8
Jiang, Qin	TA7a-3
Jiang, Ruixiang	TP2-8
Jiang, Yi	TA5-7
Jin, Gary	TA8a-5
Jin, Yuanwei	TA5-3
Jindal, Nihar	WA1-4
Jing, Yindi	TP1-8
Johnson, Richard	MP4-2
Joho, Marcel	WA4-4
Jorswieck, Eduard	MP7-9
Jorswieck, Eduard	TP7-8
Kadambe, Shubha	TA7a-3
Kamath, Ajith	MP8a-14
Kan, Hasan	TA7b-2
Karam, Lina	WA6-2
Karam, Lina	WA8b-1
Karl, William	TA6-2
Karow, Christopher	TP8a-8
Kasetkasem, Teerasit	TP2-8
Kaveh, Mostafa	MA5b-5
Kay, Steven	TA2-5
Khan, Ejaz	TP8b-11
Khan, Shoab	TA8b-8
Khan, Shoab	TA8b-9
Khlebnikov, Wassily	TA8a-12
Kichenaradjou, Andoche	TA8b-5
Kim, Doh-Hyun	TA8a-12
Kim, Il-Min	TP1-4
Kim, Jaekwon	WA8b-6
Kim, Kyeong Jin	WA8a-13
Kim, Kyungseok	WA5-9
Kim, Seung-Jun	TA8a-2
Kim, Soo-Hong	TA8a-12
Kim, Suk Suk	WA4-8
Kim, Sunwoo	TP8b-12
Kim, Sunwoo	TP8b-12
Kim, Tae	TA8a-13
Kinney, Albert	MA8b-7
Kirsteins, Ivars	WA4-6
Kjeldsen, Erik	MA4b-4
Klassen, Eric	MP6-2
Ko, Chi Chung	MA8b-10

NAME	SESSION
Koetter, Ralf	MA7b-1
Koetter, Ralf	MP1-8
Kogon, Stephen	MP5-6
Koivunen, Visa	MP8a-9
Koivunen, Visa	WA8b-4
Kong, Jun Jin	WA8b-13
Koshy, John	TP7-2
Kragh, Thomas	TA6-3
Kraut, Shawn	TA2-1
Kreithen, Daniel	TP2-7
Kreutz-Delgado, Kenneth	WA7-4
Krim, Hamid	MP6-3
Krishnamurthy, Vikram	TA4-1
Krishnamurthy, Vikram	TA4-6
Krogmeier, James V.	WA8b-3
Kuehnel, Richard	TA8b-13
Kuh, Anthony	TA7a-2
Kwon, Young-Shin	TA8a-12
Kyriakakis, Chris	MA8b-1
Kyriakakis, Chris	MA8b-13
Kyriakakis, Chris	MA8b-2
Kyriakakis, Chris	TP5-4
Labeau, Fabrice	MP3-2
Lagunas, Miguel	MP4-5
Lakovic, Ksenija	MP1-7
Larsen, Michael	WA6-4
Larsson, Erik	TP1-9
Lashkari, Khosrow	MA8b-3
Lashkari, Khosrow	MA8b-4
Lee, Barry	TA8b-6
Lee, Hua	TP8b-12
Lee, Inkyu	MA3b-1
Lee, Jeong-Jin	WA7-2
Lee, Jonghyun	MA8b-5
Lee, Joon-Yong	TA1-2
Lee, Sok-Kyu	MP8b-14
Lee, Yung	MP5-7
Lengelle, Régis	TA7a-1
Letessier, Jonathan	MP8b-2
Levy, Bernard	TA3-1
Levy, Bernard C.	WA4-7
Levy, Bernard C.	WA8b-7
Li, Hongbin	TP4-6
Li, Jian	TA5-4
Li, Jian	TA5-7
Li, Jiang	TA8a-13
Li, Xiaokun	WA6-6
Li, Yun	TP2-1
Liang, Gang	MA2b-4
Liang, Jie	TA3-5
Liang, Yi	TP6-5
Liberti, Joseph	TP7-2
Lii, Keh-Shin	WA2-1
Lim, Teng Joon	TP7-7
Lindsey, Alan	MA4b-4
Linebarger, John M.	TA8b-10
Liu, Hui	WA8a-12
Liu, Ping	MP8b-15
Liu, Ping	MP8b-4
Liu, Ping	TP8b-8
Liu, Te-Chih	TP8a-6
Liu, Wei	TP5-9
Liu, Zhen	WA6-2
Liu, Zhen	WA8b-1
Loncar, Maja	TP8b-5
NAME	**SESSION**
Lopez-Valcarce, Roberto	MP8b-1
Lopez-Vallejo, Marisa	MA3b-1
Love, David	MP7-6
Lu,	WA5-7
lundberg, magnus	WA7-3
Luo, Cheng	TA1-1
Ma, Jinghong	WA4-3
Ma,	WA5-7
Ma, Xiao	MA1b-1
Ma, Xiaoli	TP1-1
Madhow, Upamanyu	WA1-3
Magotra, Neeraj	MA3b-4
Malcolm, William	TA4-3
Maldonado, Francisco Javier	TA8a-14
Mangoubi, Rami	TA2-7
Manolakos, Elias	MP2b-4
Manry, Michael T.	TA8a-14
Manry, Michael T.	TA8a-15
Manry, Michael T.	TA8a-16
Maravic, Irena	TP8b-10
Margetts, Adam	TP4-2
Martin, Richard	MP4-7
Martin, Rick	MP4-2
Martina, Maurizio	TA8a-9
Martina, Maurizio	TA8b-7
Martina, Maurizio	WA6-7
Mary, David	MA8b-6
Mathiopoulos, P. Takis	MP8a-2
Mathiopoulos, P. Takis	TP6-7
Matz, Gerald	WA2-6
Mazet, Laurent	WA4-2
McAllister, M. Jason	TA6-8
McErlean, Donal	TP2-6
McLernon, Desmond C.	MP8b-13
McWhorter, Todd	TA5-6
Mecklenbräuker, Christoph	TP8b-5
Mecklenbrauker, Christoph F.	MP8a-10
Medard, Muriel	TA1-1
Medard, Muriel	WA1-1
Medles, Abdelkader	MP7-3
Meng, Teresa	WA1-9
Mersereau, Russell	TP3-4
Meshkat, P.	TP1-3
Miao, Zhourong	TP6-3
Mikhalevsky, Peter	MP5-4
Miki, Toshio	MA8b-4
Milanfar, Peyman	MP6-5
Milanfar, Peyman	TA6-4
Milanfar, Peyman	TA6-5
Miller, Eric	MP6-7
Miller, Michael	TP8a-5
Milosevic, Milos	MP4-3
Milosevic, Milos	WA8b-5
Milstein, Adam	TA6-1
Mitra, Sanjit	TA3-4
Mitra, Urbashi	MP8b-11
Mitra, Urbashi	TP1-6
Mitran, Patrick	MP1-4
Mizuno, Masashi	TA8a-3
Mohamad, Hafizal	TP4-3
Molino, Andrea	TA8a-9
Molino, Andrea	TA8b-7
Molino, Andrea	WA6-7
Moonen, Marc	MP4-4
Mooney, Vincent	TP3-8
NAME	**SESSION**
Morrell, Darryl	TA4-7
Mouchtaris, Athanasios	MA8b-13
Moura, Jose' M.F.	MA6b-3
Mujtaba, Syed Aon	MA3b-1
Mukkavilli, Krishna	MP7-7
Muller, Jean-Michel	WA3-4
Müller, Ralf	TP8b-5
Müller, Ralf R.	WA8b-16
Nabar, Rohit	MP7-4
Naguleswar, Sanjeev	MA4b-5
Napolitano, Antonio	WA2-8
Narayanan, Krishna	MA1b-2
Narayanan, Shrikanth	MA8b-11
Narayanan, Shrikanth	MA8b-12
Narayanan, Shrikanth	MA8b-13
Narayanan, Shrikanth	TP2-6
Narroschke, Matthias	TP6-8
Nassar, Carl	TA1-5
Nassar, Carl	TP8b-6
Neemuchwala, Huzefa	MA6b-2
Nekuii, Mehran	TP4-9
Nereyanuru, Sreenivasa	MP8a-3
Neugebauer, Shawn	MP8b-8
Nguyen, Hoang	WA4-7
Nguyen, Hoang	WA8b-7
Nguyen, Truong	MP3-4
Nguyen, Truong	MP6-8
Nie, Hong	MP8a-2
Niu, Huaning	MA7b-3
Niu, Huaning	WA8a-12
Nongpiur, Rajeev	MP4-6
North, Jan	TP8a-1
Nosratinia, Aria	MA1b-5
Nosratinia, Aria	MA5b-4
Nosratinia, Aria	TP3-6
Nowak, Robert	MA2b-3
Ochi, Hiroshi	TA8a-3
Oh, Seungseok	TA6-1
Okello, James	TA8a-3
Onggosanusi, Eko	WA5-3
Orchard, Michael	MA6b-5
Orchard, Michael T.	MP1-2
Ortega, Antonio	TP6-3
O'Sullivan, Joseph A.	MA6b-4
Oteri, Oghenekome	TP2-4
Ottersten, Bjorn	TP5-7
Owsley, Norm	MP5-2
Oyman, Ozgur	MP7-4
Ozdemir, Ozgur	MP8b-12
Ozen, Serdar	MP8a-3
Pace, Phillip	TP8a-8
Padmanabhan, Venkata	MA2b-2
Page, Joel	TA8b-2
Pal, Timothy	TP8b-12
Palem, Krishna	TP3-8
Paliouras, Vassilis	WA3-3
Palmer, Jason	WA7-4
Palomar, Daniel	MP4-5
Pandharipande, Ashish	MA4b-1
Papandreou-Suppappola, Antonia	WA8b-9
Parhami, Behrooz	TA8b-12
Parhami, Behrooz	WA3-8
Parhi, Keshab	MP8a-12
Parhi, Keshab K.	WA8b-13
Park, Jun Cheol	TP3-8
NAME	**SESSION**
Pasternak, Eli	WA8b-12
Patuck, Naushirwan	WA6-5
Patwari, Neal	WA1-5
Pauciullo, Antonio	TP8a-2
Paulraj, Arogyaswami	MP7-1
Paulraj, Arogyaswami	MP7-4
Paura, Luigi	TP8b-1
Paura, Luigi	WA8a-8
Peel, Christian	TP1-5
Perez-Gonzalez, Fernando	MP8b-1
Perreau, Sylvie	MA4b-3
Pesavento, Marius	MP8a-10
Pessoa, Lucio	MP4-3
Pessoa, Lucio F. C.	WA8b-5
Petre, Stoica	TP1-9
Petropulu, Athina	WA5-6
Petrovic, Dragan	TP2-5
Poliannikov, Oleg	MP6-3
Polley, Michael	WA8a-11
Poon, Ada	WA1-6
Poonawalla, Amyu	TA6-4
porat, ron	TA8a-8
Powers, Edward J.	WA8b-6
Prabhakar, Balaji	WA1-2
Pradhan, Sandeep	MP1-1
Pratt, Tim	TP5-1
Prendergast, Ryan	TA3-1
Puri, Rohit	MP1-1
Qidwai, Uvais	TA8a-10
Qiu, Lili	MA2b-2
Rabbat, Michael	MA2b-3
Raja, Nouman Saeed	MP1-9
Ramchandran, Kannan	MP1-1
Ramchandran, Kannan	TP2-5
Rangaswamy, Muralidhar	TP5-2
Rao, Arvind	MP2b-5
Rao, Bhaskar	MP7-5
Rao, Bhaskar	MP8a-13
Rao, Bhaskar	TA7b-3
Rao, Bhaskar D.	WA5-4
Rao, Malempati	WA2-4
Ratnakar, Niranjan	MA7b-1
Ray, Monika	TA8a-10
Redfern, Arthur	MP4-1
Redfern, Arthur	WA8a-11
Redfern, Arthur	WA8a-2
Reed, Irving S.	TA8a-1
Reed, Jeffrey	TP7-4
Reibman, Amy	TP6-6
Reuther, Albert	TP2-9
Ricci, Giuseppe	TP8a-4
Ricci, Giuseppe	TP8b-13
Ricci, Giuseppe	TP8b-14
Rice, Mark	MA4b-5
Richard, Cédric	TA7a-1
Riedi, Rudolf	MA2b-1
Rieken, David W.	TA5-1
Ritcey, James	MA5b-1
Ritcey, James	MA7b-3
Ritcey, James	MP5-9
Ritcey, James	WA8a-12
Robie, David	TP3-4
Rocha, Kelvin	MA4b-2
Rockmore, Daniel	TA2-8
Rodoplu, Volkan	WA1-9

NAME	SESSION
Roh, June Chul	MP7-5
Roh, June Chul	MP8a-13
Romberg, Justin	WA6-1
Rosenblatt, Murray	WA2-1
Rößler, Jürgen F.	TP8b-15
Rostaing, Philippe	TP7-6
Rouseff, Daniel	MP5-9
Roy, Sumit	TA1-4
Rupp, Markus	MP8a-5
Sabharwal, Ashutosh	MP7-7
Sabir, Muhammad	MP8a-6
Sabir, Muhammad	TA8b-16
Safavi, Anahid	TP4-7
Samra, Harvind	WA8b-14
Sandberg, Irwin	TA7a-4
Sans, Miquel	TA8b-11
Sansosti, Eugenio	TP8a-2
Sarma, Ashwin	WA7-1
Sarvotham, Shriram	MA2b-1
Scaglione, Anna	TA1-8
Scharf, Louis	TA2-1
Scharf, Louis	WA2-5
Scharf, Louis	WA2-9
Scheper, Richard	TA8a-7
Scherzer, Shimon	MP8a-8
Schmidt, Henrik	MP5-8
Schmidt, Henrik	TP8a-6
Schniter, Phil	WA4-4
Schniter, Philip	TP4-2
Schniter, Philip	WA8a-1
Scholnik, Dan	MP3-5
Scholtz, Robert A.	TA1-2
Schreckenbach, Frank	MP2a-3
Schreier, Peter	WA2-5
Schroeder, Jim	MA4b-5
Schubert, MArtin	TP7-8
Schuller, Gerald	TA3-7
Schulte, Michael J.	TA8b-10
Seibert, Michael	TP2-9
Seidel, Peter-Michael	MA3b-2
Selesnick, Ivan	MP3-9
Selesnick, Ivan	TA7b-1
Sendur, Levent	TA7b-1
Serpedin, Erchin	MP8b-5
Serpedin, Erchin	MP8b-6
Serpedin, Erchin	MP8b-9
Serpedin, Erchin	WA8a-7
Seskar, Ivan	MP8a-11
Sestok, Charles	MP4-1
Sethares, William	MP4-2
Sezgin, Aydin	MP7-9
Sharif, Masoud	MA7b-5
Sheikh, Hamid	WA6-3
Shen, Hao	WA8b-9
Shen, Manyuan	WA8a-12
Shi, Kai	WA8a-7
Shi, Yonggang	TA6-2
Shpak, Dale	MP4-6
Shynk, John J.	WA4-9
Shynk, John J.	WA8b-2
Siddiqui, Kashif	TA6-7
Siddiqui, Matheen	TA6-7
Sidiropoulos, Nicholas	TP2-3
sinha, pranesh	TA8b-3
Sinno, Dana	TP2-7
Skavantzos, Alexander	WA3-3
Slade, Brendon	TP4-8
Slock, Dirk	MP4-8
Slock, Dirk T.M.	MA8b-6
Slock, Dirk T.M.	MP7-3
Smith, Mark J. T.	TA3-3
Smith, Steven	TA2-3
Sniatala, Pawel	TA8b-1
Snyder, Donald L.	MA6b-4
Soatto, Stefano	MP6-1
Soderstrand, Michael	TA8b-5
Somayazulu, V.	TA1-4
Sonalkar, Ranjan	TA8a-5
Sottani, Emiliano	WA5-8
Sousa, Elvino	TP7-7
Spasojevic, Predrag	MP8a-11
Spencer, Nicholas	TP5-5
Spencer, Quentin	TP7-9
Sperry, Brian	MP5-3
Srivastava, Anuj	MP6-2
Stanczak, Slawomir	TP8b-3
Stevens, John	MA8b-7
Stewart, Robert W.	TP5-9
Stine, James	WA3-7
Stoica, Petre	TA5-4
Stoica, Petre	TA5-7
Strohmer, Thomas	MP7-6
Strohmer, Thomas	TP8b-4
Su, Weifeng	TP1-2
Sullivan, James L.	MP3-1
Sun, Yi	WA1-8
Sung, Youngchul	MP8b-16
Sung, Youngchul	WA4-1
Svantesson, Thomas	TP7-3
svensson, lennart	WA7-3
Swami, Ananthram	WA4-1
Swartzlander, Jr., Earl E.	TA8a-6
Swindlehurst, Lee	TP1-5
Taha, Ali	TA1-6
Tan, Mizhou	TP4-1
Tang, Xiangyu	MP1-8
Tarokh, Vahid	TP1-4
Taskovski, Dimitar	TP3-5
Tassiulas, Leandros	TP2-3
Teague, Keith	MA8b-9
Tepedelenlioglu, Cihan	WA8a-4
Terho, Liisa	WA8b-4
Terreno, Andrea	TA8a-9
Tesauro, Manlio	TP8a-4
Therrien, Charles W.	WA2-2
Therrien, Charles W.	WA7-7
Thilak, Vimal	TP3-6
Thirupathi, Durai	MA5b-2
Thomas, Timothy	WA5-2
Thomas, Timothy	WA5-5
Thompson, Charles	MP5-1
Thomson, David J.	WA2-3
Tian, Zhi	WA8b-11
Tisserand, Arnaud	WA3-4
Tong, Lang	MP8b-16
Tong, Lang	TP2-2
Tong, Lang	WA4-1
Torlak, Murat	MP8a-7
Torlak, Murat	MP8b-12
Tracey, Brian	TP7-5
Tran, Trac	TA3-5
Triolo, Anthony	TP7-2
Tripathi, Rashmi	TA8b-16
Tse , David	WA1-6
Tu, Zhuowen	MP6-4
Tufts, Donald	WA7-1
Tugnait, Jitendra K.	WA4-3
Tujkovic, Djordje	WA5-8
Tuqan, Jamal	MP3-7
Tuqan, Jamal	TP4-4
Tureli, Ufuk	WA8a-10
Tureli, Ufuk	WA8a-3
Tureli, Ufuk	WA8a-5
Ueda, Kenji	TA8a-3
Uma, Chander	TA8b-5
Vacca, Fabrizio	TA8a-9
Vacca, Fabrizio	TA8b-7
Vacca, Fabrizio	WA6-7
Vaidyanathan, Palghat	MP2b-3
Vaidyanathan, Palghat	MP3-8
Vaidyanathan, Palghat	TA3-8
Vajapeyam, Madhavan	TP1-6
Vanbleu, Koen	MP4-4
Vandenberghe, Lieven	WA7-8
Varanasi, Mahesh	TP8b-13
Varshney, Pramod	TP2-8
Vemireddy, Krishna	TP4-8
Venäläinen, Juha	WA8b-4
Venkatachalam, Anand	WA6-4
Verde, Francesco	TP8b-1
Verde, Francesco	WA8a-8
Vetterli, Martin	MP6-9
Vetterli, Martin	TP8b-10
Vikalo, Haris	MP2a-4
Villasenor, John	MP1-7
Vishwanath, Sriram	WA1-4
Visuri, Samuli	MP7-3
Visuri, Samuli	MP8a-9
Vogelbruch, Fabian	MP4-9
Vogelbruch, Fabian	TP4-5
Vogelbruch, Fabian	WA8b-15
Vook, Frederick	WA5-5
Vrcelj, Bojan	MP3-8
Vrcelj, Bojan	TA3-8
Wahl, Daniel	TA6-6
Wakin, Michael	MA6b-5
Wakin, Michael	WA6-1
Walker, William F.	TA6-8
Wallace, Jon	TP7-3
Wang, Dagen	MA8b-12
Wang, Hao	MP8b-7
Wang, Jibing	MP8a-4
Wang, Jibing	WA8a-15
Wang, Xiadong	TA4-6
Wang, Xiaodong	MP8b-15
Wang, Yan	MP8b-5
Wang, Yan	MP8b-6
Wang, Yan	MP8b-9
Wang, Zhisong	TA5-4
Wang, Zhou	WA6-3
Warke, Nirmal	MP4-1
Webb, Kevin	TA6-1
Wee, William	WA6-6
Wehinger, Joachim	TP8b-5
wei, bo	MP8a-1
Wei, Shuangqing	TA1-3
Weippert, Matthew	TP5-1
Weiss, Stephan	TP4-3
Weiss, Stephan	TP5-9
White, Lang	MA4b-3
Whiting, Bruce R.	MA6b-4
Wiegand, Thomas	TP6-2
Williams,	MP5-1
Wilson, Mike	TP3-3
Win, Moe	TA1-3
Witzgall, Hanna	TA5-5
Witzke, Melanie	MP2a-3
Worley, Jeremy	TP6-1
Wu, Di	MP8a-11
Wu, Peter	TP7-1
Wu, Wei	WA3-5
Wu, Zhiqiang	TA1-5
Wu, Zhiqiang	TP8b-6
Xia, Xiang-Gen	TP1-2
Xiong, Zixiang	MP1-9
Xu, Bo	MP1-4
Xu, Wen	MP5-8
Xu, Zhengyuan	MP8b-15
Xu, Zhengyuan	MP8b-4
Xu, Zhengyuan	TP8b-8
Xue, Ya	TA4-7
Yang, Liuqing	TA1-7
Yang, Liuqing	TP1-1
Yao, Kung	MP8a-4
Yao, Kung	WA8a-15
Yao, Yu-Dong	WA8a-10
Yao, Yu-Dong	WA8a-5
Yasein, Mohamed	TP3-7
yatawatta, sarod	WA5-6
Yin, George	TA4-1
Yocky, David	TA6-6
Yoon, Byung-Jun	MP2b-3
Younes, Laurent	TP8a-5
Youtz, Andrew	WA8a-9
Ysebaert, Geert	MP4-4
Yu, Bin	MA2b-4
Yu, Changhua	TA8a-16
Yu, Rongshan	MA8b-10
Yu, Xinying	MP7-2
Yue, Jiang	WA8a-14
Yue, Xiaodong	TP8b-7
Zatman, Michael	TP7-5
Zeidler, Brandon J.	MA7b-4
Zeidler, James R.	WA5-4
Zhang, Honglei	TA1-3
Zhang, Jianzhong	MP7-8
Zhang, Juntan	MA1b-3
Zhang, Rui	MP1-3
Zhang, Ruifeng	MP8b-3
Zhao, Qian	MP1-6
Zhao, Xin	TA7a-2
zhao, ying	MP1-5
Zheng, Yuan	TP6-9
Zhu, Fang	TA1-5
Zhu, Jianming	TP8b-9
Zoltowski, Michael	MP8a-3
Zoltowski, Michael	WA5-2
Zukunft, Roland	MP4-9
Zukunft, Roland	TP4-5
Zukunft, Roland	WA8b-15

Notes


Santa Cruz
To San Jose
1
156
101
Salinas
Pacific Grove
Monterey
Asilomar
68
68
Pebble Beach
Carmel
101
1
To Los Angeles

2002 Asilomar Conference
Code Ec/FA
Naval Postgraduate School
833 Dyer Road, Rm. 437
Monterey, CA 93943-5121