

Schedule at a glance

Wednesday October 14, 2009		Thursday October 15, 2009		Friday October 16, 2009	
		8:15–9:55	Session B UW ACOMMS I Laurel	8:15–9:30	Session G UW ACOMMS III Laurel
		9:55–10:20	Break Laurel	9:30–9:55	Break Laurel
		10:20–12:00	Session C UW ACOMMS II Laurel	9:55–10:45	Session H Passive Laurel
		12:00–1:00	Lunch Whisp. Pines	10:45–12:00	Session I Array I Laurel
		1:00–2:15	Session D Active Laurel	12:00–1:00	Lunch Whisp. Pines
		2:15–3:05	Session E Passive I Laurel	1:00–2:15	Session J Array II Laurel
		3:05–3:30	Break Laurel		
		3:30–5:10	Session F Prop.-Based Laurel		
5:00–6:00	Welcome Reception Whisp. Pines				
6:00–8:00	Raytheon Dinner Whisp. Pines	6:00–8:00	OES Dinner Whisp. Pines		
8:00–9:30	Session A Plenary Laurel	8:00–?	SOB Session Laurel		

## Sessions: Titles and presenters

**Session A: Wednesday Evening, 8:00pm–9:30pm**

**Special Session Plenary Talk**

- A-1 *Underwater Acoustic Communications: Working at the Intersection of Physics, Signal Processing, and Communications Theory*,  
James C. Preisig, Woods Hole Oceanographic Institution

**Session B: Thursday Morning, 8:15am–9:55am**

**Special Session I: Underwater Acoustics Communications Fields Experiment Results**

- B-1 *Taxonomy of Underwater Communication for US Navy Needs*,  
Arthur B. Baggeroer, Massachusetts Institute of Technology
- B-2 *Recent results on underwater acoustic communication research*,  
T. C. Yang, Naval Research Lab
- B-3 *Measurement-based simulation of underwater acoustic communication channels*,  
Paul Van Walree, Norwegian Defence Research Establishment FFI
- B-4 *Training Sequence Synthesis, Channel Estimation and Symbol Detection for MIMO Underwater Acoustic Communications*,  
Jian Li, University of Florida

**Session C: Thursday Morning, 10:20am–12:00pm**

**Special Session II: Underwater Acoustics Communications Fields Experiment  
Results**

- C-1 *Signal Processing for Underwater Acoustic MIMO OFDM*,  
Milica Stojanovic, Northeastern University
- C-2 *Results of OFDM Transmissions in the Kauai Acomms MURI 2008 Experiment*,  
Tolga Duman, Arizona State University
- C-3 *Receiver Comparisons on an OFDM Design for Doppler Spread Channels*,  
Shengli Zhou, University of Connecticut
- C-4 *On Optimal Resampling for OFDM Signaling in Doubly Selective Underwater Acoustic Channels*,  
Srinivas Yerramalli, University of Southern California

**Session D: Thursday Afternoon, 1:00pm–2:15pm**

**Active Sonar**

- D-1 *Detection-Threshold Approximation for non-Gaussian Backgrounds*,  
Douglas Abraham, CausaSci LLC
- D-2 *A Generalized Linear Filtering Approach for Sonar Receivers*,  
Nabin Sharma, University of Massachusetts Dartmouth
- D-3 *Robust Sonar Identification and Authentication in Shallow Water*,  
Bijan Mobasser, Villanova University

**Session E: Thursday Afternoon, 2:15pm–3:05pm**

**Passive Sonar I**

- E-1 *Multiband DEMON Estimation with Compensation for Channel-Induced Modulation Distortions*,  
Ivars Kirsteins, Naval Undersea Warfare Center
- E-2 *Minimum Hellinger Distance Classification of Passive Underwater Acoustic Signals*,  
Brett Bissinger, Penn State University

**Session F: Thursday Afternoon, 3:30pm–5:10pm**

**Propagation-based Sonar Processing**

- F-1 *Time-Frequency Approach and Approximation to Range-Dependent Pulse Propagation*,  
Patrick Loughlin, University of Pittsburgh
- F-2 *The propagation of noise fields in a dispersive medium: a phase-space approach*,  
Leon Cohen, City University of New York
- F-3 *Sequential and iterative Bayesian methods for acoustic feature estimation*,  
Zoi-Heleni Michalopoulou, New Jersey Institute of Technology
- F-4 *Statistics-based classification of passive sonar signals*,  
R. Lee Culver, Penn State University

**Session G: Friday Morning, 8:15am–9:30am**

**Special Session III: Underwater Acoustics Communications Fields Experiment Results**

- G-1 *Application of the Turbo principle to Underwater Acoustic Communications: Receiver Architectures and Experimental Results*,  
Jun Won Choi, University of Illinois at Urbana-Champaign
- G-2 *Markov Chain Monte Carlo Detectors for underwater acoustic channels*,  
Rong-Rong Chen, University of Utah
- G-3 *High rate time reversal communications for underwater MIMO channels*,  
Aijun Song, University of Delaware

**Session H: Friday Morning, 9:55am–10:45am**

**Passive Sonar II**

- H-1 *Maximum entropy probability density functions and recursive Bayesian state estimation*,  
Colin Jemmott, Penn State University
- H-2 *Detection and classification of odontocetes - algorithms and architecture for autonomous, deployable system*,  
Paul Hursky, Heat, Light, and Sound Research Inc.

**Session I: Friday Morning, 10:45am–12:00pm**

**Array Processing I**

- I-1 *Performance Prediction Analysis of Depth Discrimination Algorithm*,  
Shawn Kraut, MIT Lincoln Laboratory
- I-2 *A Globally Convergent CML Algorithm*,  
Neil Malloy, Multisensor Science LLC
- I-3 *Application of Multitaper Spectral Estimation Methods For Adaptive Beamforming*,  
Joseph Schwarzwalder, Argon ST, Inc.

**Session J: Friday Afternoon, 1:00pm–2:15pm**

**Array Processing II**

- J-1 *Spatial Compressive Sensing for Passive Sonar Arrays*,  
Igal Bilik, University of Massachusetts Dartmouth
- J-2 *Exploiting Towed Array Dynamics for Passive Field Directionality Mapping*,  
Jeffrey Rogers, Duke University
- J-3 *Passive Ranging Capability of Multi-Module Arrays in Underwater Acoustic Environments*,  
Hongya Ge, New Jersey Institute of Technology