



CALL FOR PAPERS
46th Annual Asilomar Conference on
Signals, Systems, and Computers



Asilomar Hotel and Conference Grounds
Pacific Grove, California
November 4-7, 2012
www.asilomarsc.org

Authors are invited to submit papers before **May 1st, 2012**, in the following areas:

A. Communications Systems: 1. Modulation and Detection, 2. Error Control Coding, 3. OFDM/Multicarrier, 4. Cognitive Radio, 5. Adaptive Waveforms, 6. Wireless Security/Privacy, 7. Power Line Communication, 8. DSL and Wireline Technologies, 9. 60 GHz, 10. Optical Communications, 11. 4G Applications, 12. Future Trends

B. MIMO Communications and Signal Processing:
1. Space-Time Coding and Decoding, 2. Channel Estimation and Equalization, 3. Multiuser MIMO, 4. Base Station Cooperation, 5. Limited Feedback Techniques, 6. Interference Management

C. Networks: 1. Transmission Techniques for Ad Hoc Networks, 2. Wireless Sensor Networks, 3. Network Information Theory, 4. Cooperative Diversity, 5. Relays, 6. Heterogeneous Networks, 7. Cognitive/Adaptive Sensor Networks

D. Signal Processing and Adaptive Systems: 1. Compressive Sensing, 2. Machine Learning Based Statistical Signal Processing, 3. Information Theoretic Signal Processing, 4. Cognitive Information Processing, 5. Adaptive Filtering, 6. Fast Algorithms

E. Array Signal Processing: 1. Source Localization, 2. Source Separation, 3. Adaptive Beamforming 4. Robust Methods,

5. Computational Aspects, 6. Applications (Sonar, Radar, Microphone arrays, etc.)

F. Biomedical Signal and Image Processing: 1. Medical Image Analysis, 2. Imaging Modalities, 3. Advances in Medical Imaging, 4. Biomedical Signal Processing, 5. Biomedical Applications, 6. Bioinformatics, 7. Image Registration and Multimodal Imaging, 8. Image Reconstruction, 9. Computer Aided Diagnosis, 10. Functional Imaging, 11. Visualization

G. Architecture and Implementation: 1. Energy Efficient Design, 2. High-Speed Computer Arithmetic, 3. Reconfigurable Signal Processing, 4. Multicore, Manycore and Distributed Systems, 5. Algorithm and Architecture Co-optimization, 6. System-Level Representation and Synthesis, 7. Cyber-Physical System Prototypes/Testbeds

H. Speech, Image and Video Processing: 1. Speech Processing, 2. Speech Coding, 3. Speech Recognition, 4. Narrowband/Wideband Speech and Audio Coding, 5. Document Processing, 6. Models for Signal and Image Processing, 7. Image and Video Coding, 8. Image and Video Segmentation, 9. Image and Video Analysis, 10. Image/Video Security, Retrieval and Watermarking, 11. Image and Video Enhancement/Filtering, 12. Biometrics and Security, 13. Wavelets

Submissions should include a 50 to 100 word abstract and an extended summary (500 to 1000 words, plus figures). Submissions must include the title of the paper, each author's name and affiliation, and the technical area(s) in which the paper falls with number(s) from the above list. Check the conference website (www.asilomarsc.org) for specific information on the electronic submission process. Submissions will be accepted starting February 1, 2012. **No more than FOUR submissions are allowed** per contributor, as author or co-author. **All submissions must be received by May 1st, 2012.** Notifications of acceptance will be mailed by mid July 2012, and author information will be available on the conference website by late July 2012. Full papers will be due shortly after the conference and published in early 2013. All technical questions should be directed to the Technical Program Chair, **Dr. Erik G. Larsson**, e-mail erik.larsson@isy.liu.se or the General Chair, **Dr. Miloš Doroslovački**, e-mail doroslov@gwu.edu. Prospective organizers are invited to submit proposals for **special sessions** or **tutorials** to erik.larsson@isy.liu.se or doroslov@gwu.edu by January 15, 2012. Proposals must include a topical title, rationale, session/tutorial outline, contact information, and a description of how the session/tutorial will be organized.

CONFERENCE COMMITTEE

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The site for the 2012 Conference is at the Asilomar Conference Grounds, in Pacific Grove, CA. The grounds border the Pacific Ocean and are close to Monterey, Carmel, and the scenic Seventeen Mile Drive in Pebble Beach.

The Conference is organized in cooperation with ATK Space Systems, Monterey, CA. The IEEE Signal Processing Society is a technical co-sponsor of the conference.