



# CALL FOR PAPERS

## 51<sup>st</sup> Annual Asilomar Conference on Signals, Systems, and Computers



**Asilomar Hotel and Conference Grounds**  
**Pacific Grove, California**  
**October 29 - November 1, 2017**  
[www.asilomarssc.org](http://www.asilomarssc.org)

Authors are invited to submit papers before **May 1<sup>st</sup>, 2017**, in the following areas:

**A. Communications Systems:** 1. Modulation and Detection, 2. Coding and Decoding, 3. OFDM/Multicarrier, 4. Cognitive Radio, 5. Game Theory in Communications, 6. Physical Layer Security, 7. mmWave, 8. Underwater, 9. DSL and Wireline Technologies, 10. Guided and Free-space Optical, 11. Satellite, 12. Internet of Things

**B. MIMO Communications and Signal Processing:** 1. Space-Time Coding, 2. Channel Estimation and Equalization, 3. Multiuser and Massive MIMO, 4. Cooperation and Relaying, 5. Limited Feedback, 6. Interference Management, 7. mmWave

**C. Networks:** 1. Ad Hoc Networks, 2. Wireless Sensor Networks, 3. Network Info. Theory, 4. Optimization, 5. Heterogeneous Networks, 6. Graph Signal Processing, 7. Social Networks, 8. Distributed Algorithms, 9. Security, 10. Computational Offloading, 11. Software Defined Access Networks, 12. Vehicular Networks, 13. Smart Grid

**D. Signal Processing and Adaptive Systems:** 1. Compressive Sensing, 2. Machine Learning, 3. Statistical Signal Processing, 4. Information Theoretic & Cognitive Signal Processing, 5. Adaptive Filtering, 6. Adaptive Sensing, 7. Fast Algorithms, 8. High-Dimensional Large-Scale Data, 9. Data and Decision Fusion, 10. Deep Learning

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

5. MIMO Radar, 6. Tensor Models and Processing, 7. Applications (Sonar, Radar, Microphone Arrays, etc.)

**F. Biomedical Signal and Image Processing:** 1. Molecular and Medical Imaging, 2. Imaging Modalities, 3. Image Formation and Reconstruction, 4. Processing of Physiological Signals, 5. Bioinformatics and Computational Biology, 6. Image Registration and Multimodal Imaging, 7. Functional Imaging, 8. Brain Machine Interfaces, 9. Neural Signal Processing, 10. Visualization

**G. Architecture and Implementation:** 1. Energy-Efficient Design, 2. High-Speed Computer Arithmetic, 3. Reconfigurable Signal Processing, 4. Multicore, Many-core and Distributed Systems, 5. Algorithm and Architecture Co-optimization, 6. System-Level Representation and Synthesis, 7. Cyber-Physical System Prototypes/Test-beds, 8. Mixed-Signal Processors

**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 and Communication, 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. Hybrid Imaging Systems

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.asilomarssc.org](http://www.asilomarssc.org)) for specific information on the electronic submission process. Submissions will be accepted starting February 1, 2017. **No more than FOUR submissions are allowed** per contributor, as author or co-author. **All submissions must be received by May 1<sup>st</sup>, 2017.** Notifications of acceptance will be mailed by mid July 2017, and author information will be available on the conference website by late July 2017. Full papers will be due shortly after the conference and published in early 2018. All technical questions should be directed to the Technical Program Chair, **Prof. Joseph Cavallaro**, e-mail [cavallar@rice.edu](mailto:cavallar@rice.edu) or the General Chair, **Prof. Geert Leus**, email [g.j.t.leus@tudelft.nl](mailto:g.j.t.leus@tudelft.nl). Prospective organizers of **special sessions** are invited to submit proposals to General or Technical Chair by January 15, 2017. Proposals must include a topical title, rationale, session outline, contact information, and a description of how the session will be organized.

### CONFERENCE COMMITTEE

General Chair: Geert Leus, *Delft University of Technology*  
Technical Program Chair: Joseph Cavallaro, *Rice University*  
Conference Coordinator: Monique P. Fargues\*, *Naval Postgraduate School*  
Publication Chair: Michael Matthews, *NorthWest Research Associates, Inc.*  
Publicity Chair: Linda S. DeBrunner, *Florida State University*  
Finance Chair: Ric Romero\*, *Naval Postgraduate School*  
Electronic Media Chair: Marios S. Pattichis, *University of New Mexico*

The site for the 2017 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 by the non-profit Signals, Systems and Computers Conference Corporation. \*Serving in his/her personal capacity.