# ­­CALL FOR PAPERS

**52nd Annual Asilomar Conference on Signals, Systems, and Computers**

**Asilomar Hotel and Conference Grounds Pacific Grove, California**

**October 28 - 31, 2018**

[**www.asilomarssc.org**](http://www.asilomarssc.org/)

Authors are invited to submit papers before **May 1st, 2018**, in the following areas:

1. **Communications Systems**: 1. Modulation and Coding,

2. Cognitive Radio and Spectrum Sharing, 3. Ultra-Low Latency,

4. Optimization, 5. Physical Layer Security and Privacy, 6. mmWave,

7. Underwater, 8. Wireline and Optical Communications, 9. Satellite,

10. IoT, 11. V2V, 12. 5G and Beyond

## MIMO Communications and Signal Processing:

* 1. Multiuser and Massive MIMO, 2. Channel Estimation & Equalization, 3. Full-Duplex, 4. Cooperation & Relaying,

5. Interference Management & Awareness, 6. mmWave, 7. Optimization

1. **Networks:** 1. Wireless Networks, 2. IoT, 3. Network Info. Theory,

4. Optimization, 5. Graph Signal Processing, 6. Social Networks,

7. Distributed Algorithms, 8. Security, 9. Computational Offloading,

10. Self-Organizing Networks, 11. UAV & V2V Netw., 12. Smart Grid

## Adaptive Systems, Machine Learning, Data Analytics:

* 1. Compressive Sensing, 2. Machine Learning, 3. Estimation, Inference and Learning, 4. Adaptive and Cognitive Systems, 5. Adaptive Filtering,

6. Fast and Scalable Algorithms, 7. High-Dimensional Large-Scale Data,

8. Distributed Computation and Storage, 9. Deep Learning

1. **Array Processing and Multisensor Systems**: 1. Source Localization and Separation, 2. Beamforming, 3. Robust Methods

4. MIMO and Cognitive Radars, 5. Tensor Models and Processing,

6. Sparse Sensor Arrays, 7. Optimization, 8. Applications (Imaging, Sonar, Radar, Microphone Arrays, etc.).

1. **Biomedical Signal and Image Processing**: 1. Molecular and Medical Imaging, 2. Computational Imaging, 3. Neuroengineering,

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

1. **Architectures and Implementation**: 1. Energy Efficiency,

2. Accelerators, 3. Reconfigurable Processing, 4. Non-idealities,

5. Multicore, Many-core & Distributed Systems, 6. Algorithm & Architecture Co-optimization, 7. Architectures for Big Data,

8. Architectures for Machine Learning 9. Cyber-Physical System,

10. Test-beds, 11. Mixed-Signal Processors 12. Arithm. & Algorithms

1. **Speech, Image and Video Processing**: 1. Speech Processing,

2. Speech Coding, 3. Speech Recognition, 4. Audio Coding,

5. Document Processing, 6. Models for Signal and Image Processing,

7. Image and Video Coding and Communication, 8. Learning and Autonomous Systems, 9. Computer Vision, Image and Video Analysis,

10. Image/Video Forensics, 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, authors’ names and affiliations, technical area, and topic designation 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, 2018. **No more than FOUR submissions are allowed** per contributor, as author or co-author. **All submissions must be received by May 1st, 2018**. Notifications of acceptance will be mailed by mid July 2018, and author information will be available on the conference website by late July 2018. Full papers are due shortly after the conference and published in early 2018. **To publish a paper the author must register and present the paper at the conference.** All technical questions should be directed to Technical Program Chair **Prof. Martin Haardt**, e-mail [martin.haardt@tu-ilmenau.de](mailto:martin.haardt@tu-ilmenau.de) or General Chair **Prof. Visa Koivunen**, email [visa.koivunen@aalto.fi.](mailto:visa.koivunen@aalto.fi) Prospective organizers of special sessions are invited to submit proposals to the General or Technical Chair by January 15, 2018. Proposals must include title, topic, rationale, session outline, contact information, and a description of how the session will be organized.

**CONFERENCE COMMITTEE**

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### The site for the 2018 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.