CALL FOR PAPERS

2013 IEEE International Symposium on Phased Array Systems & Technology

Revolutionary Developments in Phased Arrays

15–18 October 2013

Westin Waltham Hotel, Greater Boston, Massachusetts, USA

www.array2013.org

About the Symposium

Phased array systems continue to be a rapidly evolving technology with steady advances motivated by the challenges presented to modern military and commercial applications. This symposium will present the most recent advances in phased array technology and present a unique opportunity for members of the international community to interact with colleagues in the field of Phased Array Systems and Technology.

Phased Array 2013, the 5th International Symposium on Phased Array Systems and Technology, will be held at the Westin Hotel in Waltham Massachusetts on Boston's famous Route 128 Technology Highway. The symposium will include keynote and plenary sessions, parallel technical sessions, poster sessions, tutorials, and a student paper contest. Social events will include a welcome reception cocktail hour with dinner and an awards banquet.

Suggested Topics

- System Architecture
- Phased Array Applications and Platforms
- Module Design
- Solid-State Technologies
- Antenna Elements
- Beam Steering Techniques
- Aperture Design
- Signal Processing for Arrays
- Array Measurements
- Sparse Aperture Techniques
- Metamaterials
- Advanced Materials
- Ultrawideband Arrays
- Low Cost Arrays and Systems

Important Dates

Summary (~1000 words + figures)	**15 Dec 2012**
Notification of Acceptance	**1 Feb 2013**
Final Papers (8 page max)	**1 June 2013**

Special Sessions

Please provide suggestions for special sessions to the Technical Chair at info@array2013.org.

Paper Template and Submission Procedures

Template and submission procedures are available at www.array2013.org/forauthors.html

Publication Information

All accepted papers will be published on the conference CD-ROM and distributed to conference attendees. Selected papers meeting the publishing requirements will be published in IEEE Xplore as part of the IEEE Conference Publication Program.

Conference Committee

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Primary Sponsor:
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SUGGESTED TOPICS

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System Architecture

- Design, Analysis, Optimization
- Array Task Prioritization and Time/Energy/Scan Scheduling for Efficient Operation
- Multiple-Function Arrays

Phased Array Applications and Platforms

- Arrays for Radar, Communications, Navigation, Mapping, Commercial Applications, Radio Astronomy
- Fixed, Mobile, Airborne, Sea-Based, and Space-Based Arrays

Module Design

- Novel Transmit/Receive (T/R) Module Design
- Low Cost T/R Modules
- T/R Module Packaging
- T/R Module Thermal Management

Solid-State Technologies

- MMIC Solid-State Technologies:
- GaN, SiC, SiGe, GaAs, CMOS, FETs, HEMTs, etc.

Antenna Elements

- Radiating Elements, Patterns, and Blindness Avoidance:
- Patch, Notch, Dipole, Monopole, Waveguide, Slot, etc.

Beam Steering Techniques

- Phase-Shift Steering
- Time-Delay Steering
- Digital Beamforming
- Optical/Photonic Beamforming
- Multiple-Beam Arrays
- Radiation Pattern Synthesis

Aperture Design

- Aperture Arrays: Linear, Planar, Circular, Spherical, Conformal
- Low Cost Arrays
- Limited-Field-of-View Arrays
- Reflect-Arrays

Signal Processing for Arrays

- Adaptive Arrays to Reject RF Interference/Clutter/Jamming
- Adaptive Signal Processing
- Multiple-Input, Multiple-Output (MIMO) Processing
- Angle-of-Arrival Estimation / Direction Finding

Array Measurements

- Array Measurement Techniques, Calibration, Failures, Diagnostics, Fault Isolation
- Array Error Analysis, Measurement Accuracy Prediction, Performance Evaluation, Pattern Errors

Sparse Aperture Techniques

- Coherent, Distributed-Aperture (CDA) Arrays
- Sparse Arrays
- Multiple-Input, Multiple-Output (MIMO) Arrays

Metamaterials

- Electromagnetic Band Gap (EBG) Surfaces
- Frequency Selective Surfaces (FSSs)

Advanced Materials

- Nanotechnologies
- Graphene
- Micromachining

Ultrawideband Arrays

- Multiband
- Broadband

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