



IEEE International Radar Conference
 Crystal Gateway Marriott
 Washington DC, USA
 May 10 -14, 2010
www.radar2010.com

Call for Papers

Please join us for the 2010 IEEE International Radar Conference in Washington, D.C. USA. The 2010 conference theme is "Global Innovation in Radar" and the following page shows the topics to be covered.

We look forward to seeing you in Washington, DC, USA!

PAPER GUIDELINES

Summary Paper Requirements

Authors must submit a 3-4 page summary paper, including figures. Electronic submission is required in Microsoft Word or PDF in the format provided at www.radar2010.com/AuthorGuidelines.html. The deadline for submission of summary papers is November 30, 2009. Authors may indicate paper suitability for a poster format presentation, if desired. Student papers are strongly encouraged. They must follow the same requirements as above, and must be identified as student papers.

Acceptance

Authors will be notified of acceptance by January 22, 2010. At least one author from each accepted paper **must pre-register and attend** the conference to present their paper. Authors who do not attend the conference to present their papers, or who do not arrange for a co-author or knowledgeable colleague to present their paper in the absence of the primary/registered author, will not have their papers published in the conference proceedings on IEEE Xplore.

Final Paper

Final papers should be no more than 6 pages, including figures and references. Instructions and format for the final paper will be provided on the Author Guidelines page of the International Radar Conference 2010 website. Completed electronic papers (up to 6 pages inclusive of text, figures, and tables) will be required by March 01, 2010.

Important Dates to Remember:

Abstracts Due:	November 30, 2009
Notification of Acceptance:	January 22, 2010
Paper Submissions Due:	March 01, 2010



CONFERENCE VENUE

The conference venue will be the Marriott Crystal Gateway Hotel in Crystal City, Arlington, VA. Crystal City is immediately adjacent to the Pentagon and directly across the Potomac River from the Washington, DC Mall and is located at: 1700 Jefferson Davis Highway, Arlington, Virginia 22202 USA

For more information and/or to submit an abstract, please visit our website at
<http://www.radar2010.com>

Papers are now being solicited in the following topical areas:

Phenomenology and Modeling

- Physics-based Models
- Computational EM Techniques
- Statistical and Data-driven Models
- Measured Data Analysis
- High Fidelity Modeling and Simulation
- Weather/Atmospheric Modeling
- Land and Sea Clutter Modeling
- Radar Cross Section (RCS) Modeling

Radar Systems Architectures

- Open System Radars
- Modular Radar Architectures
- Radar Software Architectures
- Bistatic/Multi-static Systems
- Multi-Function Radar
- Radar Sensor Management

Radar System Military Applications

- Fire Control Radar
- Missile Defense Radar
- Airborne Early Warning Radar
- Air-Surface Surveillance and Tracking Radar
- Cruise Missile Defense Radar
- Surface-Air Surveillance and Tracking Radar
- Surface to Surface Radar
- Space Based Radars
- Space Object Monitoring Radar
- Terrain Following/Terrain Avoidance
- Over The Horizon Radar (OTHR)
- Integrated Radar/EA/ESM Systems
- Missile Seekers

Signal and Data Processing

- Advanced Waveforms
- Mathematical Techniques
- Adaptive Processing Algorithms
- Beamforming
- Synthetic Aperture Techniques (SAR, ISAR, InSAR)
- Multiple Input Multiple Output (MIMO)
- Space Time Adaptive Processing (STAP)
- High Range Resolution (HRR)
- Detection/Estimation
- Array Processing
- Spread Spectrum and LPI Techniques
- Noise Radar
- Tracking
- Aided and Automatic Target Recognition
- Electronic Protection and ECCM Techniques
- Radar Signal Processors
- Radar Netting
- Multi-sensor Data Fusion Mgmt/Allocation/Processing
- Radar Calibration and Validation
- RF Tomography

Environmental Applications

- Weather Radar
- Windshear Detection Radar
- Atmospheric Sounders/Profilers
- Earthquake/Volcano/Tectonic Monitoring
- Planetary/Lunar Mapping Radar

Active ESAs

- Architectures
- Radiating Apertures and AESA RCS
- T/R Modules
- MMICs for Radar
- Analog and Digital Beamforming
- High Density AESA Power Supplies
- AESA Thermal Management
- AESA Applications

Emerging Technologies

- Radar for Irregular Warfare
- Building Penetration
- Foliage Penetration
- Below Ground Imaging/Sensing
- Waveform Diversity, Design, and Optimization
- Computational Methods and Architectures
- Dismount Detection
- Counter IED/Mines
- Ultra Wide Band Radar
- Laser Radar
- Millimeter Radar/Radiometry

Components and Subsystems

- Time Delays
- Phase Shifters
- Filter Technology
- Meta-material Applications for Radar
- Waveform Generators
- Digital Radar Receivers
- A/D Technology
- Micro Electro Mechanical Switches (MEMS)
- Superconducting Components
- Terahertz Detectors
- MMW Radar Antennas
- MMW Transmitters
- MMW Passive Components for Radar
- High Density Radar Power Supplies
- RF Photonics

Antenna Technology

- Adaptive Arrays
- Conformal Arrays
- Wideband Antennas
- Radiating Element Design
- Beam Pattern Analysis/Synthesis
- Sidelobe Control
- Polarization Diverse Arrays
- Emerging Antenna Concepts

Civil/Security Radar Applications

- Air Traffic Control
- Navigation Radars/Altimeters
- Enhanced Vision Systems
- Law Enforcement
- Marine Surveillance and Navigation Radar
- Automotive Radar
- Port/Harbor/Coastal Surveillance
- Border Surveillance
- Medical Monitoring and Imaging
- Terahertz Imaging – Passive and Active