# 2018 IEEE Radar Conference

RadarConf '18

www.radarconf18.org

Spurring Innovation

23-27 April 2018
Oklahoma City, OK, USA

## CALL FOR PAPERS

### Pioneering Spirit of the American Southwest

In 2018, the IEEE Radar Conference arrives in vibrant Oklahoma City for the first time. Being centrally located in the US, OKC is known for great Southern cuisine, Midwestern hospitality, and a good helping of Wild West cowboy culture. Nearby Norman, OK is the home of NOAA's National Severe Storms Laboratory and the Advanced Radar Research Center at the University of Oklahoma, who collectively have driven much of the modern-day weather radar technology in the US. Do not miss this exciting week filled with novel radar advances and down-home fun.

### The Venue

The 2018 IEEE Radar Conference will be held at the Renaissance OKC Convention Center Hotel by Marriot. In addition to the elegant conference amenities and ample space for exhibitors, tutorials, and those oh-so-useful hallway discussions, the prime location near the Bricktown entertainment district, professional basketball (OKC Thunder), minor league baseball (OKC Dodgers), numerous top-tier restaurants, and exciting nightlife ensures that attendees can both work hard and play hard. The conveniently located Will Rogers World Airport provides easy access to the conference venue.

### Call for Papers

Original papers describing significant advances in radar technologies, systems, applications and techniques are sought. Prospective authors should prepare a 4-6 page full paper (including supporting figures) using the IEEE format. Papers should be submitted no later than **18 October 2017**. Complete submission instructions can be found at **www.radarconf18.org**.

Particular topics of interest include, but are not limited to:

- **Radar Signal & Data Processing**, including STAP, MIMO, compressive sensing, SAR / ISAR processing, digital beamforming, array processing, super-resolution techniques, detection and false alarm enhancement, waveform diversity, target tracking and fusion;
- **Radar Phenomenology**, including target and clutter estimation and modeling, atmospheric propagation and scattering phenomenology, foliage and ground penetration, exploitation of multipath;
- **Radar Systems**, including innovative designs / missions for airborne, spaceborne & shipborne radar, imaging radar, multistatic / passive radar, air traffic radar, automotive radar, multifunction radar, sense & avoid radar for UAVs, weather radar;
- **Antenna Technology,** including conformal arrays, design for low sidelobe level, ultrawideband, metamaterials, multi-polarization, frequency-diverse array, & multiple beams;
- **Emerging Radar Technologies,** including co-operative radar systems (scheduling, networking, fusion), cognitive radar, fully digital phased array radar, passive radar, ultrawideband radar including foliage and ground penetration;
- **Subsystems and Components**, including novel & advanced processing architectures, software-defined radar, advanced components (e.g. SiC, GaN MMICs), real-time processing platforms (e.g. FPGA, GPU), T/R modules, and advanced receiver designs.

In addition, special sessions are being planned for several topics, including:

- **Cognitive Radar;**
- **Radar/Communication Spectrum Sharing;**
- **Weather Radar;**
- **Radar Systems & Phased Arrays;**
- **Automotive Radar;**
- **Waveform Diversity; and**
- **Scientific Remote Sensing.**

### Key Dates:

**Special Session Proposals Due: 18 August 2017**
**Tutorial Submissions Due: 31 August 2017**
**Paper Submissions Due: 18 October 2017**
**Notification of Acceptance: 15 January 2018**
**Paper Submission Due: 26 February 2018**