

Subject Areas RADAR2024

Antenna

- └ Antenna and array design
- └ Array processing
- └ Beamforming and MIMO
- └ Digital front-end, new AESA technology

Applications

- └ Automotive radar
- └ Biological/Medical sensing
- └ Over-The-Horizon
- └ Passive and multistatic radar
- └ Weather radar

Phenomenology

- └ Clutter suppression
- └ Earth observation
- └ Environment modeling & virtual qualification
- └ Ground/Foliage penetration
- └ Polarimetry
- └ Propagation modeling
- └ RCS characterization, simulation, and modeling

Radar Signal Processing and Methods

- └ Advances in signal processing for radar
- └ AI/ML applied to radar
- └ ATR/NCTR and Classification
- └ Cognitive radar
- └ Compressive sensing and sparse representation
- └ Detection and Estimation
- └ Dual-function communication-radar systems
- └ Interference cancellation
- └ MIMO radar processing
- └ Radar imaging, advances in SAR/ISAR
- └ Radar tracking
- └ Spectrum management and waveform design
- └ Tracking and multisensor fusion, meta-sensors

Radar Systems

- └ Advanced components for radar systems
- └ Counter-UAV
- └ Future trends in radar systems
- └ MMW, sub-MMW radar, and short-range radars
- └ Onboard UAV systems
- └ Software Defined Radar
- └ Space-based radar systems
- └ Ultrawideband systems

Special Sessions

- └ Advanced SAR processing techniques for security and safety applications
- └ AI for radar
- └ Compact SAR and UAV platform
- └ Emerging trends in ML for polarimetric and/or interferometric SAR imaging
- └ History of radar
- └ Multistatic radar and radar networks
- └ SONDRRA - France-Singapore Lab 20 years of collaboration in radar