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
- SONDRA - France-Singapore Lab 20 years of collaboration in radar