Submitted papers can include, but do not have to be exclusively limited to:

Track 1: MIMO

- Massive MIMO and beyond
- Multicellular and cell-free MIMO
- MIMO radar

Track 2: AI for smart antenna systems

- AI for Next-Gen wireless networks, with applications to massive MIMO, ISAC, mmWave/THz communications
- AI-native PHY/MAC design for multi-antenna systems, including beamforming, channel estimation, modulation and multiple access
- AI-based intelligent radio resource allocation in multi-antenna systems

Track 3: Electromagnetic Signal Processing and Propagation

- Holographic beamforming and reconfigurable Intelligent surfaces (RIS)
- True time delay beamforming
- Time/frequency modulated arrays
- Near-field beamforming & localization

Track 4: Integrated Sensing and Communication

- Enabling and emerging technologies for ISAC: massive MIMO, RIS, antenna concepts/technology
- Coexistence of ISAC with legacy systems using array processing
- Security, privacy, and trustworthiness for ISAC in multi-antenna architectures

Track 5: Multi antenna solutions for Non-Terrestrial Networks

- Distributed antenna and processing solutions for NTN
- Direct-to-Device (D2D) / Direct-to-Cell (D2C) communication leveraging MIMO technologies
- Coexistence and convergence with terrestrial networks (TNs) enabled by multi-antenna signal processing

Track 6: Photonics for Antenna Arrays

- Photonic beamforming and RF signal distribution
- Integrated Photonic technologies for antenna arrays
- Photonics for sensing and communications

- Fiber–Wireless convergence for 5G/6G and beyond
- AI/ML-Assisted photonic beam steering and adaptive antenna systems
- Radio-over-Fiber (RoF) and microwave photonics for smart antenna systems

Track 7: Resilient Multi Antenna Communications

- Beamforming and beam management for robust communications
- Jamming / interference detection and mitigation
- Novel frameworks to make future wireless networks resilient by design
- End-to-end architectures, protocols, and algorithms for ultra-reliable communication networks

Track 8: Experimental and Field Trials for smart antenna systems

- Over-the-air experiments and field trials
- Hardware-based prototyping and testbeds
- Measurement-driven channel characterization

Track 9: Terahertz signal processing, technology and applications

- THz signal processing (beam training/tracking, channel estimation, near-field communications)
- THz transceivers & RF/antenna arrays
- Reconfigurable THz technologies & smart surfaces
- THz-enabled applications (ISAC, material characterization, imaging, localization etc)