

# Call for Papers

The **7th ACM Workshop on Millimeter-Wave and Terahertz Networks and Sensing Systems** is focused on the design and implementation of new algorithms, protocols and systems for communication, networking and systems in the millimeter-wave (mmWave) and terahertz (THz) bands. The scope of the workshop ranges from new ultra-broadband networks, which can enable multi-Gbps and even Tbps throughput, ultra-low latency, and reliable wireless connectivity for beyond 5G and 6G cellular systems and wireless LANs, to new sensing systems with unprecedented resolution and innovative features enabled by the electromagnetic properties of radiation above 100 GHz. The workshop will bring together researchers from devices, communications and signal processing, wireless networking, and mobile and sensing applications to set the future research agenda of mmWave and THz systems, and present innovative ideas that will help realize the vision of extremely high data rate, ultra-low latency, and reliable mmWave networks and novel advanced sensing applications.

We solicit papers with original unpublished ideas in mmWave and THz networks and sensing systems. Also, we solicit submissions with novel results in experimental platforms, system measurements, and prototypes. Submissions will be judged by their technical merit through a peer-review process by the Technical Program Committee.

## Topics of interest include, but are not limited to:

- MmWave and THz physical, MAC, network, transport, application, and cross-technology/layer concepts and designs
- Beamforming techniques including analog and hybrid digital- analog beamforming
- Mechanisms to support link discovery, establishment, mobility, and tracking
- MmWave and THz massive MIMO, and ultra-massive MIMO techniques
- IEEE 802.11ad/ay and 5G/6G pico-cells design and deployment
- Ultrabroadband wireless backhaul based on mmWave/THz technology, integrated access and backhaul
- MmWave- and THz-based secure communications for 5G/6G
- MmWave- and THz-based URLLC for 5G/6G
- MmWave and THz research platforms and testbed development
- Spectrum sharing above 100 GHz, coexistence of active and passive users, policy and regulatory aspects
- Channel measurements, modeling, and simulations
- Localization and gesture tracking using mmWave and THz signals
- Medical applications of mmWave and THz sensing systems
- RADAR, imaging systems and techniques for mmWave and THz
- Joint communications and sensing systems in the mmWave and THz bands
- MmWave and THz V2X: Vehicular-to-everything communication
- Emerging mmWave and THz applications including AR/VR, wireless data centers, and drone-based networks

## Important Dates:

<b>Paper submission deadline:</b>	June 19, 2023
<b>Notification of acceptance:</b>	July 31, 2023
<b>Camera-ready deadline:</b>	August 11, 2023
<b>Workshop date:</b>	October 2 or 6, 2023