ICM²TS International Conference on Mobile and Miniaturized THz Systems



2026 International Conference on Mobile and Miniaturized Terahertz Systems (ICM²TS) July 19–22, 2026 | Kruger National Park, South Africa

Radio systems were invented ~130 years ago and first used for voice transmission at kHz frequencies, requiring antennas the size of houses. Around 50 years later, they were used for video transmission at MHz frequencies with devices the size of refrigerators. Then, another 50 years later, they were used for data transmission at GHz frequencies with the advent of pocket-sized digital phones. Now is the time to harness THz frequencies for their unique ability to enable tiny and mobile devices measuring less than a millimeter in size to undertake new research challenges with high societal impact.

These small THz devices enable new applications in various fields, including counting and localizing cells in our vessels and organs with miniaturized THz receivers, recording body and muscle movements, monitoring plant-insect interactions with miniaturized THz radars, detecting and localizing bacteria and viruses in our environment, analyzing gas composition in space with mobile THz spectroscopy, dynamically mapping or testing materials with mobile THz reflectometry, and transmitting data at extremely high rates with mobile THz communications.

Therefore, ICM²TS focuses on the numerous scientific and technological challenges posed by the required miniaturization and mobility. We warmly welcome contributions from universities, research institutions, industry partners, visionaries, and lateral thinkers eager to make THz-enabled "smart dust" a reality. With eight keynotes, twelve focused sessions, and four panels, ICM²TS aims to bring together the world's leading THz scientists and engineers to encourage collaboration and bring THz technology to mass markets with high societal impact. To further support this goal, startup and large-scale project sessions are an integral part of ICM²TS.

Keynote Speakers

- Peter H. Siegel, “Commercializing THz Imaging through the SiGe Revolution in Germany”
- John Cunningham, “UK THz Network and Projects - from robotically controlled Medical Imaging to Communications”
- Nils Pohl, “Closing the THz Gap ? - The Way of SiGe towards higher Frequencies”
- Andreas Stöhr, “Innovative Solutions and Open Challenges for THz Communications and Sensing”
- Luis M. Correia, “Requirements for Reliable Mobile Communications in the THz Band”
- Daniel M. Mittleman, “Sensing with Curved Terahertz Beams”
- Two more keynotes

Focused Sessions

- THz Electronics
- THz Photonics
- THz Beamforming
- THz Communications
- THz Radar
- THz RIS
- THz Life Science Monitoring: Insects & Plants & Humans
- THz Localization and Identification
- THz Computing
- THz SAR
- THz Materials
- THz NDT

Panel, Poster, and Startup Sessions

- Is **miniaturization** the destiny of THz ?
- How to commercialize **M²TS** ?
- How to set up a **public THz database** ?
- How to conduct research on **M²TS applications**?

Important Dates

Proposals for Tutorials and Special Sessions:
~~**July 31, 2025**~~
Deadline Passed

Submission Deadline for Papers:
~~**October 31, 2025**~~
Extended to November 19, 2025

Acceptance Notification:
Until December 31, 2025

Camera-ready Submission:
April 19, 2026

ICM²TS Organizing Committee

General Chair	**Thomas Kaiser**
General Co-Chair	**Fawad Sheikh**
TPC Chair	**Andreas Czylwik**
Tutorial Chair	**Daniel Erni**
Publication Chairs	**Feng Zheng, Ali Alhaj Abbas**
Publicity Chairs	**Mohammed El-Absi, Nidal Zarifeh**
Local Arrangements	**Thokozani Shongwe, Han Vinck, Akram Najjar**
Internal Coordinators	**Baha Salah, Amani Atiani**
Talent Travels	**Andreas Prokscha, Yamen Zantah**

6 M² Awards for S³ (Students, Scientists, and Startups)

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Papers are invited to be uploaded on the EDAS system: https://edas.info/newPaper.php?c=33888. Your paper should follow the IEEE two-column format with single-spaced, 10-point font in the text. MS Word or LaTex templates can be downloaded from https://www.ieee.org/conferences/publishing/templates.html. The paper length should be two to five pages, including all figures, tables, references, and so on. All papers that meet IEEE quality standards and are presented by one of the authors will be submitted to IEEE Xplore for indexing. Note that the total number of attendees is limited to 125.