

FIRST CALL FOR PAPERS

KEY DATES

06 January 2025

Special Session Proposals Due

06 April 2025

Paper Submission Due

06 April 2025

Tutorial Proposals Due

06 June 2025

Acceptance Notification

06 July 2025

Final Paper Submission Due

Aim & Scope

The 2025 IEEE Radar Conference will be held in Krakow, Poland, for the first time, jointly sponsored by the Aerospace & Electronic Systems Society (AESS), the IEEE Poland Section, and Polish Joint Chapter AP/AES/MTT. The 2025 conference will focus on joint radar and communications involving the latest radar technologies through plenary talks, special sessions, tutorials, and the radar boot camp.

Original papers describing significant advances in radar technologies, systems, applications, and techniques are sought. Prospective authors should prepare a 4-6 page full paper (including figures) using the IEEE format. Submission instructions can be found at www.radarconf2025.org

Krakow, also spelled Cracow, one of the largest cities in Poland, is known primarily for its grand historic architecture and cultural leadership. With thousands of historic buildings and sites dotting the city, Krakow's old town is worth special attention and consideration (on the UNESCO World Heritage list since 1978). Its medieval marketplace, Rynek Glowny (the Main Square), has existed since the 13th century and is a true gem.

We look forward to welcoming you to Krakow,

prof. Mateusz Malanowski and prof. Piotr Samczynski,

RadarConf 2025 General Co-Chairs, Warsaw University of Technology, Poland

Particular topics of interest include, but are not limited to:

Radar Systems & Applications

- » Joint radar and communications
- » Innovative designs for airborne, spaceborne and shipborne radar
- » Imaging radar
- » Distributed radar
- » Air traffic radar
- » Automotive radar
- » Multi-function radar
- » Weather radar
- » Passive radar
- » Medical/Biological Sensing
- » Over-the-horizon radar

Radar Phenomenology & Remote Sensing

- » Target and clutter estimation
- » Modeling
- » Atmospheric propagation and scattering phenomenology
- » Foliage / ground penetration
- » Multipath exploitation

Radar Signal & Data Processing

- » STAP & adaptive processing
- » MIMO / frequency-diverse radar
- » Sparsity-based sensing
- » SAR / ISAR processing
- » Array processing
- » Super-resolution techniques
- » Detection and false alarm improvements
- » Waveform diversity & design
- » Target tracking and fusion
- » Classification and identification
- » Simultaneous multiple beams

Antenna Technology

- » Conformal arrays
- » Design for low sidelobe level
- » Ultra-wideband
- » Metamaterials
- » Multi-polarization
- » Frequency-diverse arrays
- » Simultaneous multiple beams

Sub-Systems and Components

- » Novel & advanced processing architectures
- » Software-defined radar
- » RF system-on-chip (RF-SoC),
- » Advanced components (e.g., GaN MMICs)
- » Real-time processing (FPGA, GPU)
- » T/R modules
- » Advanced receiver designs
- » Simultaneous transmit /receive architectures

Emerging Radar Technologies

- » Cooperative radar systems (scheduling, networking, fusion)
- » Radar spectrum sharing
- » Cognitive radar
- » Fully digital phased array radar
- » Terahertz radar
- » Machine learning applications
- » Multi-spectral sensing

RadarConf'25

2025 IEEE RADAR CONFERENCE

October 4-10, 2025 // ICE Krakow Congress Centre // Krakow, POLAND



Communicating Radar Sense

SAVE THE DATE: October 4-10, 2025, Krakow, POLAND

The Venue

The 2025 IEEE Radar Conference will be held at the ICE Krakow Congress Centre located in the very heart of Krakow. This business and cultural flagship of the city is a convenient place for the organization of diverse events. There are a lot of housing accommodations in the surrounding area. Krakow old town offers attendees a wide array of shopping, dining, and other entertainment options – all within easy walking distance of the hotels. The best way to discover this charming zone is to wander down its cobblestone streets without a specific direction. It is packed with fascinating landmarks, traditional Polish restaurants, souvenir shops, and open-air cafés that are always brimming when the sun comes out. Kazimierz and Nowa Huta (one of the largest planned socialist realist districts ever built, as a utopian ideal city) districts extend south and east of downtown, allowing visitors to further explore the city by foot, bike or tram.

Tutorials

Brief tutorial proposals should be submitted via e-mail to tutorials@radarconf2025.org by **6 April 2025** to the Tutorial co-Chairs and must include a title, outline, contact information, biography, and a description of the tutorial material to be distributed to participants.

Diversity, Equity, and Inclusion (DEI)

A Diversity, Equity, and Inclusion event is being planned. It will be focused on what it means to be an inclusive leader in today's research community.

