WORKSHOPS AND SHORT COURSES

WWW.EUMW.EU - 132

THURSDAY 08:30 - 11:30

Active Phased Arrays: Bridging Design and Measurement for Young and Industry Professionals Part 1

WTh03 EuMC

Chair: Kamil Yavuz Kapusuz¹

Co-Chair: Marc Dirix²

¹IMEC-Ghent University/Belgium, ²Emerson & Cuming AC

Room: Polar

The workshop Active Phased Arrays: Bridging Design and Measurement for Young and Industry Professionals aims to provide a comprehensive view of the evolving landscape of active phased array technologies, with a strong emphasis on practical integration, simulation, and measurement challenges. Designed to connect young professionals with experienced experts from industry and academia, this event fosters cross-disciplinary dialogue and collaboration.

The workshop explores key developments in the design, realization, and optimization of small and large-sized active phased array systems operating across a broad frequency spectrum, from megahertz (MHz) to terahertz (THz). It covers a wide range of topics, including advanced simulation tools,

integration techniques, efficient thermal management, and innovative phased array architectures. The program highlights the importance of bridging theory and application by addressing the full design-to-deployment pipeline, including system-level thinking and cross-functional co-design.

In addition to the technical content, the workshop includes interactive opportunities for networking and career development, encouraging participants to engage with peers, mentors, and potential collaborators. By promoting both technical depth and practical insight, the workshop supports the growth of a new generation of engineers and researchers capable of driving innovation in (active) phased array technologies for communications, sensing, and beyond.

PROGRAMME

IEEE MTT-S Young Professionals: Driving Innovations from MHz to THz

Goutam Chattopadhyay¹
¹2025 President, IEEE MTT-S

Towards Low-Loss Integration of D-Band Phased Arrays with CMOS Beamformers and SiGe Power Amplifiers

Samuel Rimbaut¹

Dedicated Software Tool for Rapid Full-Wave Design, Optimisation and Analysis of Phased Array Antennas

Cecilia Cappellin¹

Coffee Break

Design, Simulation and Realization of Phased Array Antennas

Simona Bruni¹

1IMST

WORKSHOPS AND SHORT COURSES

WWW.EUMW.EU - 133

THURSDAY 13:50 - 17:50

Active Phased Arrays: Bridging Design and Measurement for Young and Industry Professionals Part 2

WTh03 EuMC

Chair: Kamil Yavuz Kapusuz¹

Co-Chair: Marc Dirix²

¹IMEC-Ghent University/Belgium, ²Emerson & Cuming AC

Room: Flash

The workshop Active Phased Arrays: Bridging Design and Measurement for Young and Industry Professionals aims to provide a comprehensive view of the evolving landscape of active phased array technologies, with a strong emphasis on practical integration, simulation, and measurement challenges. Designed to connect young professionals with experienced experts from industry and academia, this event fosters cross-disciplinary dialogue and collaboration.

The workshop explores key developments in the design, realization, and optimization of small and large-sized active phased array systems operating across a broad frequency spectrum, from megahertz (MHz) to terahertz (THz). It covers a wide range of topics, including advanced simulation tools,

integration techniques, efficient thermal management, and innovative phased array architectures. The program highlights the importance of bridging theory and application by addressing the full design-to-deployment pipeline, including system-level thinking and cross-functional co-design.

In addition to the technical content, the workshop includes interactive opportunities for networking and career development, encouraging participants to engage with peers, mentors, and potential collaborators. By promoting both technical depth and practical insight, the workshop supports the growth of a new generation of engineers and researchers capable of driving innovation in (active) phased array technologies for communications, sensing, and beyond.

PROGRAMME

Leveraging Open-Source Silicon Design for European Competitiveness

Thomas Parry

¹Spherical

Small Scale Integrated Antenna Systems

David Sillars¹

¹Qorvo

A Holistic Design Approach for D-Band Telecommunication/ Sensing Packages and Antenna-Arrays

Francesco Filice¹¹IMEC, Belgium

Coffee Break

Integrated Antenna Design and Cooling Concepts in Active Phased Arrays

Yanki Aslan¹

Delft University of Technology

Enabling Wide-Angle 2D Scanning with Dielectric Resonator Antenna Arrays

Tudor Popa¹

¹The Antenna Company

Get Together and Drinks