

THURSDAY 08:30 - 12:30

Multistatic/Distributed Radar System

Chair: Matthew Ritchie¹

Co-Chair: Elisa Giusti²

¹UCL, ²CNIT

Room: Juliana 3

WTh02
EuRAD

This workshop will explore recent advancements in multistatic and distributed radar systems, addressing key challenges, experimental results, and emerging applications. The event will provide a comprehensive overview of the state of the art in the field, offering participants valuable insights into both fundamental and applied aspects of radar systems.

The primary topics covered will include synchronization and timing requirements, which are essential for ensuring accurate signal processing in distributed radar architectures. The discussion will explore the challenges associated with both coherent and incoherent signal processing techniques and the strategies employed to achieve precise synchronization across multiple radar

nodes, enabling effective data fusion and reliable performance in multistatic setups.

The workshop will also delve into practical applications such as passive radar techniques and SAR measurements, addressing the benefits and limitations of various system configurations and platforms.

Finally, the focus will shift to practical implementations and experimental results, highlighting recent advancements in multistatic radar imaging, synchronization techniques, and distributed sensing systems. The discussions will feature real-world case studies and insights into the latest innovations, providing attendees with a deeper understanding of how these technologies are being deployed in current radar systems.

By presenting these cutting-edge topics, the workshop will be highly relevant for professionals working in radar systems, radar signal processing, and distributed sensing technologies, offering valuable perspectives on current challenges and future directions in the field

PROGRAMME

Multistatic Sensing - Introduction to Benefits and Challenges

Matthew Ritchie¹

¹UCL

Timing/sync requirements

Piers Beasley¹

¹BAE

Distributed passive radar systems

Krzysztof Kulpa¹

¹WUT

Distributed SAR measurements

Michael Antoniou¹

¹UoB

Multi-bistatic Interferometric ISAR

Elisa Giusti¹

¹CNIT