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Aalto University School of Electrical Engineering



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2023 JOINT IEEE SPS-AESS AND EURASIP SUMMER SCHOOL ON INTEGRATED SENSING AND COMMUNICATION

26-29 June 2023, Baiona, Spain



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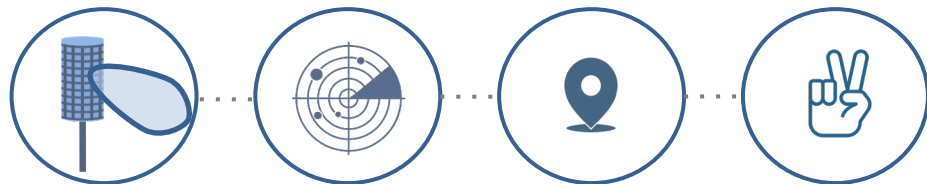
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REGISTRATION OPEN

conference.ece.ncsu.edu/isac/

This summer school intends to provide a complete perspective of all possible types of interaction between sensing and communication that can be exploited in current and future wireless systems. From strategies for coexistence and co-design of sensing and communication, to newer approaches that directly exploit the downlink/uplink communication signals for sensing, or more disruptive applications that go beyond providing position and velocity estimations. Emphasis will be placed on a multidisciplinary perspective, highlighting considerations often neglected related to hardware constraints, practical antenna designs for different frequency bands, or realistic architectures. The attendees will be exposed to top researchers from diverse backgrounds, representing the signal processing, aerospace, microwave, communications, and computing communities.



SESSIONS

- Technologies for coexistence and co-design
- Distributed integrated sensing and communication
- Passive radar
- Localization based on channel state information at mmWave
- Operation in THz bands
- Waveform optimization for joint radar and communication
- Multicarrier waveform design for integrated sensing and communication
- Beamforming for joint radar and communication with self-interference cancellation constraints
- Prototyping joint radar and communication systems
- RIS-aided joint radar and communication
- Gesture and human activity recognition
- Environmental radio mapping
- Sensor-aided communication in vehicular channels