

Vertical and Topical Tracks Program

(WEDST – Western European Daylight Savings Time, Local Time in Aveiro)

San Francisco	New York	Aveiro	Rome	New Delhi	Beijing
00:30h-02:30h PDST	03:30h-05:30h EDST	08:30h-10:30h WEDST	09:30h-11:30h CEST	13:00h-15:00h IST	15:30h-17:30h CST
03:00h-05:00h PDST	06:00h-08:00h EDST	11:00h-13:00h WEDST	12:00h-14:00h CEST	17:30h-19:30h IST	20:00h-22:00h CST
06:00h-08:00h PDST	09:00h-11:00h EDT	14:00h-16:00h WEDST	15:00h-17:00h CEST	20:30h-22:30h IST	23:00h-01:00h CST (Next Day)
08:00h-10:00h PDST	11:30h-13:30h EDST	16:00h-18:00h WEDST	17:00h-19:00h CEST	22:30h-00:30h IST (Next Day)	01:00h-03:00h CST (Next Day)

Key to Vertical and Topical Tracks (details)

Special Sessions	Subject	Workshops	Subject
Vert-01	Space	Topi-01	Sensors and Devices
Vert-02	Maritime	Topi-02	Communications and Networking
Vert-03	Agriculture and Aquaculture	Topi-03	Security, Privacy, and Trust
Vert-04	Smart Cities and Mobility	Topi-04	Artificial Intelligence and Machine Learning
Vert-05	Energy, Build Environment, and Sustainability	Topi-05	Computing and Data Processing
Vert-06	Industry and Manufacturing		

	<p style="text-align: center;">Vertical and Topical Track Program Chairs</p> <ul style="list-style-type: none"> • Damir Filipovic, Alliance for IoT and Edge Computing Innovation (AOTI), Brussels, Belgium • Heiner Stüttgen, IEEE Communications Society & NEC Laboratories Europe (retired), Heidelberg, Germany
Topi-02	“ <u>Communications and Networking</u> ”

	Chairs	<ul style="list-style-type: none"> • Ayman Radwan, Instituto de Telecomunicações, Aveiro, Portugal • Borja Genovés Guzmán, University of Virginia, Charlottesville, Virginia, USA
	<p>Topi-02 - Session 1</p> <p>Monday October 23rd 14:00-16:00 WEDST Virtual</p>	<p>Session 1: “Beyond 5G and towards 6G.”</p> <p>Moderator: Ayman Radwan, Instituto de Telecomunicações, Aveiro, Portugal</p> <p>Talk 1 (Presentation 1471): “Empowering 6G Networks: Autonomous RIS Solutions for Seamless Integration and Enhanced Performance”, Francesco Devoti, NEC Laboratories Europe GmbH, Heidelberg, Germany.</p> <p>Talk 2: “Programmable Metasurfaces for Wireless Communications: A Loaded Thin Wire Model.”, Marco Di Renzo, Laboratory of Signals and Systems (L2S) of Paris-Saclay University, CNRS and CentraleSupélec, Paris, France.</p> <p>Talk 3 (Presentation 1465): “Natively integrating AI in mobile networks”, Network Data Group, Marco Fiore, IMDEA Networks Institute, and Net AI Tech Ltd., Madrid, Spain.</p>
	<p>Topi-02 - Session 2</p> <p>Tuesday October 24th 14:00-16:00 WEDST Virtual</p>	<p>Session 2: “Cloud, edge, and far edge / Cloud Edge Continuum.”</p> <p>Moderator: Borja Genovés Guzmán, University of Virginia, Charlottesville, Virginia, USA</p> <p>Talk 1 (Presentation 1464): “Cloudification of the mobile network stack: benefits and challenges”, Marco Gramaglia, Universidad Carlos III de Madrid, Madrid, Spain.</p> <p>Talk 2 (Presentation 1472): “Getting the Best of Both Worlds (IoT and Edge/cloud) using Hierarchical Inference”, Jaya Prakash Varma Champati, IMDEA Networks Institute, Madrid, Spain.</p> <p>Talk 3 (Presentation 1478): “Joint 5G and Robot Orchestration Leveraging Mobile Edge Offloading”, Xi Li, Lanfranco Zanzi, Carmen Delgado, Arnau Romero, and Xavier Costa-Perez, 6G Network R&D at NEC Laboratories GmbH, Heidelberg, Germany and i2CAT Foundation, Barcelona, Spain.</p>
	<p>Topi-02 - Session 4</p> <p>Thursday October 26th 14:00-16:00 WEDST Virtual</p>	<p>Session 4: “Advanced technologies in antenna design and transceivers.”</p> <p>Moderator: Borja Genovés Guzmán, University of Virginia, Charlottesville, Virginia, USA</p>

		<p>Talk 1 (Presentation 1468): “5G/mm-wave for Long Range Wirelessly Powered Communications, Localization, and Sensing.”, Aline Eid, Department of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, Michigan, USA</p> <p>Talk 2: “Enabling last mile connectivity and backhaul in 5G using light communication.”, Deepak Solanki, Founder and CEO, Velmenni Ltd., Delhi, India.</p> <p>Talk 3 (Presentation 1491): “Ultra-Low Power Receivers in Self-Powered Industrial IoT Applications”, Kuo-Ken Huang, Everactive, Santa Clara, California.</p>
	<p>Topi-02 - Session 5</p> <p>Friday October 27th 14:00-16:00 WEDST Virtual</p>	<p>Session 5: “Interoperability between Cellular, WiFi, Space, Satellite and Optical.”</p> <p>Moderator: Borja Genovés Guzmán, University of Virginia, Charlottesville, Virginia, USA</p> <p>Talk 1 (Presentation 1466): “The role of visible light communications as an enabler for IoT in RF-hostile scenarios.”, Maximo Morales Cespedes, Universidad Carlos III de Madrid, Madrid, Spain.</p> <p>Talk 2: (Presentation 1469): “On the possibilities of Visible Light and Optical Camera Communications for IoT.”, Marisa Catalan Cid, Internet of Things (IoT) R&D Group at i2Cat Foundation, Madrid, Spain.</p> <p>Talk 3 (Presentation 1459): “Global Connectivity via Satellite Communications.”, Eva Lagunas Targarona, University of Luxembourg, Luxembourg.</p>