

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, Built Environment, and Sustainability	Topi-05	Computing and Data Processing
Vert-06	Industry and Manufacturing		

Vertical and Topical Track Program Chairs	
	<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
Vert-01	“ <i>Space</i> ”

	Chairs	<ul style="list-style-type: none"> • Tomaso de Cola, German Aerospace Center (DLR), Institute of Communications and Navigation, Oberpfaffenhofen-Wessling, Germany. • Nuno Borges de Carvalho, Instituto de Telecomunicações, Aveiro, Portugal
	<p>Vert-01- Session 1</p> <p>Monday October 23rd 14:00-16:00 WEDST Virtual</p>	<p>Session 1: “Where the Internet of Space meets the Internet of Things.”</p> <p>Moderator: Maria Rita Palatella, Luxembourg Institute of Science and Technology (LIST), Luxembourg</p> <p>Talk 1(Presentation 1541): “IoT in B5G networks: architectures and challenges.”, Carla Amatetti, Department of Electrical, Electronic, and Information Engineering, University of Bologna, Bologna, Italy.</p> <p>Talk 2 (Presentation 1477): “An industry implementation of a minimum workable solution by Sateliot for 5G NB-IoT NTN coverage extension for Mobile Network Operators in Delay Tolerant IoT Applications Use Cases.”, Marco Guadalupi, Co-founder & CTO Sateliot, Barcelona, Catalonia, Spain.</p> <p>Talk 3 (Presentation 1497): “IoT for Earth Observation satellites: a true game changer and Federator.”, Josep Rosello, and Steven George, European Space Agency (ESA), Paris, France.</p> <p>Talk 4 (Presentation 1456): “The value of Space assets for IoT Applications.”, Maria Rita Palatella, Luxembourg Institute of Science and Technology (LIST), Luxembourg.</p>
	<p>Vert-01- Session 2</p> <p>Tuesday October 24th 14:00-16:00 WEDST Virtual</p>	<p>Session 2: “Exploration of the Earth, the Solar System and Deep Space.”</p> <p>Moderator: Tomaso de Cola, DLR, Oberpfaffenhofen-Wessling, Germany.</p> <p>Talk 1 (Presentation 1474): “Internet of Interplanetary Things for Space Exploration Missions.”, Scott Burleigh, D3TN, Los Angeles, California, USA.</p> <p>Talk 2 (Presentation 1495): “Routing in the Interplanetary Internet of Things.”, Juan Andrés Fraire, ISFP Researcher, INRIA, Lyon, Auvergne-Rhône-Alpes, France.</p> <p>Talk 3 (Presentation 1526): “Scalable IoT Networking in Space.”, Felix Walter, D3TN, GmbH, Dresden, Germany.</p>
	<p>Vert-01- Session 3</p> <p>Wednesday October 25th</p>	<p>Session 3: “Satellite Technologies for Sensing and Communications”</p> <p>Moderator: Carla Amatetti, University of Bologna, Italy</p> <p>Talk 1 (Presentation 1480): “Enabling Global IoT Connectivity through Standardized Satellite Communication.”, Svend Holme Sørensen, Gatehouse Satcom, Ålborg, North Jutland, Denmark.</p>

	<p>14:00-16:00 WEDST Virtual</p>	<p><i>Talk 2 (Presentation 1476): “Minimum workable solution for satellite infrastructure in low earth orbit for 5G NB-IoT NTN connectivity, CubeSat ecosystem and 3GPP protocol evolution to fit different use cases.”, Marco Guadalupi, Co-founder & CTO Sateliot, Barcelona, Catalonia, Spain.</i></p> <p><i>Talk 3: (Presentation 1544): “IoT Supporting Earth Observations.”, Frank Zeppenfeld, European Space Agency, the Hague, Netherlands.</i></p>
	<p>Vert-01- Session 4</p> <p>Thursday October 26th 14:00-16:00 WEDST Virtual</p>	<p>Session 4: “The role of space IoT in overall industry sectors”</p> <p>Moderator: Daniele Tarchi, University of Bologna, Bologna Italy</p> <p><i>Talk 1 (Presentation 1527): “Internet of Remote Things for Digital Agriculture.”, Manlio Bacco, European Commission, Joint Research Centre, Pisa, Tuscany, Italy</i></p> <p><i>Talk 2 (Presentation 1517): “Future Railway Mobile Communication System: A Use-Case for NTN?”, Benjamin Barth, German Aerospace Center (DLR), Köln, Germany</i></p> <p><i>Talk 3: “TBD.”, Daniel Maximilian Mielke, Institute of Communications and Navigation, German Aerospace Center (DLR), Oberpfaffenhofen-Wessling, Germany.</i></p> <p><i>Talk 4 (Presentation 1484):” Internet of Vehicles meets Intelligence at the Edge in Space-Air-Ground Integrated Networks.”, Daniele Tarchi: University of Bologna, Bologna, Italy.</i></p>