

# EUCNC | 6G Summit

Grenoble, France ■ 7-10 June 2022

**Connectivity for a Sustainable World**



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## CALL FOR PAPERS

### Steering Committee Chairs

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### Track Co-Chairs

#### *PHY - Physical Layer and Fundamentals*

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Marco Di Renzo, CNRS, FR  
Besna Smida, U. Illinois, US

#### *RAS - Radio Access and Softwarisation*

Mickael Maman, CEA Leti, FR  
Jean Schwoerer, Orange Labs, FR  
Kei Sakaguchi, TIT, JP

#### *WOS - Wireless, Optical and Satellite Netw.*

Petar Popovski, U. Aalborg, DK  
Nicolas Chuberre, Thales, FR  
Taesang Choi, ETRI, KR

#### *NET - Network Softwarisation*

Artur Hecker, Huawei, DE  
Panagiotis Demestichas, Wings ICT, GR  
Tommaso Melodia, Northwestern U., US

#### *VAP - Vertical Applications and IoT*

Luis Muñoz, U. Cantabria, ES  
Konstantin Mikhaylov, U. Oulu – 6G Flagship, FI  
Guan Gui, NUPC, CN

#### *OPE - Operational & Experimental Insights*

Vincenzo Sciancalepore, NEC, DE  
Valerio Frascolla, INTEL, DE

#### *Ilgyu Kim, ETRI, KR*

#### *CME - Components & Microelectronics*

Didier Belot, CEA Leti, FR  
Andreia Cathelin, STM, FR  
Angela Wang Bo, U. Tech. and Design, SG

#### *6GV - 6G Visions*

Marja Matinmikko-Blue, U. Oulu – 6G Flagship, FI  
Volker Ziegler, Nokia, FI  
Akihiro Nakao, U. Tokyo, JP

#### *6ET - Enabling Technologies*

Nandana Rajatheva, U. Oulu – 6G Flagship, FI  
Mikko Uusitalo, Nokia, FI  
Mark Rodwell, U. Santa Barbara, US

### Panels Co-Chairs

Jorge Pereira, E.C., BE  
Markus Mueck, INTEL, DE  
Thomas Haustein, HHI, DE

### Special Sessions Co-Chairs

Filipe Cardoso, I. Poly. Setúbal, PT  
Daniele Tarchi, U. Bologna, IT  
Melike Erol-Kantarci, U. Ottawa, CA

### Workshops Co-Chairs

Zdenek Becvar, CTU, CZ  
Joseph Vidal, UPC, ES  
Stefano Basagni, U. Northwestern, US

### Tutorials Co-Chairs

George Alexantropoulos, NKUA, GR  
Henk Wymeersch, Chalmers U., SE  
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### Exhibitions Co-Chairs

Mario Boldi Renato, Telecom Italia, IT  
Mario Scillia, E.C., BE

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### USRI Liaison

Sana Salous, U. Durham, UK

EUCNC & 6G Summit 2022 is the 31<sup>st</sup> edition of a successful series of a conference in the field of telecommunications, sponsored by the European Commission. The conference focuses on various aspects of 5G and 6G communications systems and networks, including cloud and virtualisation solutions, management technologies, hardware components and microelectronic technologies, and vertical application areas. It targets to bring together researchers from all over the world to present the latest research results, and it is one of the main venues for demonstrating the results of research projects, especially from successive European RDI programmes.

We invite submissions on a wide range of topics including, but not limited to:

#### *PHY - Physical Layer and Fundamentals*

Beyond 5G & 6G and THz communications  
Reconfigurable radios and new radio heads  
Massive and Ultra-Massive MIMO  
AI/ML in the PHY Layer  
Propagation & channels at mm Waves & THz  
New air interfaces, waveforms, modulation & coding techniques

#### *RAS - Radio Access and Softwarisation*

Spectrum management and reutilisation  
Cognitive and green radio  
Configurable radio, resources & SDR  
Energy efficient RRM, radio slicing and virtualisation  
Wireless edge caching  
Radio access architectures

#### *NET - Network Softwarisation*

Cognitive network management  
Programmable networks  
Software defined networking  
AI/ML in service provisioning  
Data aware networks and overlays  
Network operating system  
Quality (QoE and QoS) aware networking  
Security, trust and privacy

#### *CME - Components and Microelectronics*

Novel MIMO & wideband mm Wave devices  
Components for mm Wave and beyond  
Antenna design & integration  
RIS components & integration  
RF front-end and THz techniques  
Low power silicon RF, including wake up  
Next generation of DSP, including RISC V & ASIP

Edge AI component technologies  
Digital HW architecture for ultra-high speed and/or ultra-low latency PHY

#### *6GV - 6G Visions*

Stakeholder groups are invited to give thought-provoking presentations on 6G visions. Full papers and extended abstract are welcome.

#### *WOS - Wireless, Optical and Satellite Nets.*

Beyond 5G & 6G access and core networks  
Advances in M2M, WSN, IoT networks  
Next generation passive optical networks  
Satellite and terrestrial networks convergence  
VLEO satellite systems and networks  
Communications for unmanned platforms (UxV)  
TSN for industrial communications  
Communications for navigation and observation  
Green wireless/optical/satellite networks  
AI/ML for wireless/optical/satellite networks

#### *VAP - Vertical Applications and IoT*

Factory automation and industrial IoT solutions  
Autonomous driving and V2X solutions  
Critical communications and public safety  
Smart farming and environmental monitoring  
Digital health and wellbeing  
Emerging business models  
IoT service management

#### *OPE - Operational & Experimental Insights*

Beyond 5G trials and experiments  
Large-scale open testbeds and experiments  
Evaluation and analysis of experimental data  
Deployment insights from verticals  
Plug-and-play deployments and experiments  
Network forensics & network instrumentation  
Next Generation Internet architectures and experimentation

#### *6ET - 6G Enabling Technologies*

Technologies for Tbps transmission  
3D imaging and sensing with localisation  
New component technologies and materials  
Telepresence and mixed reality  
ML/AI for autonomous systems optimisation  
Novel network architectures  
6G Spectrum  
Blockchain technology in mobile networks  
Quantum Cryptography  
Semantic communications  
Reconfigurable Intelligent Surfaces

**Key dates: 2022 Jan. 28** – Papers submission deadline  
**2022 Apr. 04** – Notification of acceptance  
**2022 Apr. 15** – Final paper submission