



Venue: Sapienza University Di Rome

1<sup>st</sup> Call for Papers

### Steering Committee

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 Dr A M Vegni - Roma Tre Unive., Italy - *Chair of Local Organising Committee*  
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 Dr M Biagi - Sapienza Unive. Di Roma, Italy - *Co-Chair of LOC*



Since 1998 CSNDSP has been recognised as an international forum to present and exchange research findings and discuss future research topics in the fields of communication systems, communications networks, digital signal processing and other related areas. CSNDSP offers the opportunities for researchers to participate in organising workshops, tutorials, and open discussions in upcoming research topics. CSNDSP 2024 is organized jointly by Roma Tre University and Sapienza University of Rome in Italy. The Local Organising Committee invites you to submit original high-quality papers for presentation at CSNDSP 2024, which will be held at the most beautiful and historic city of Rome, Italy. As in previous events, CSNDSP 2024 will also be hosting dedicated colloquiums and several special sessions on selected topics that you may wish to submit papers.

### Local Organising Committee

Dr Anna Maria Vegni, Roma Tre University, Italy  
 Dr Mauro Biagi, Sapienza University of Rome, Italy  
 Dr Romeo Giuliano, Guglielmo Marconi University, Italy  
 Dr Massimo Massaro, Roma Tre University, Italy  
 Dr Andrea Petroni, Fondazione Ugo Bordoni, Italy  
 Dr Cristina Ponti, Roma Tre University, Italy  
 Dr Alessandro Stuart Savoia, Roma Tre University, Italy  
 Dr Joaquin Perez Soler, Universitat de València, Spain

### Organising Committee

#### Colloquium

Prof A T Pham - The University of Aizu, Japan  
 Prof Z Xu - Univ. of Science & Technology of China, China  
 Prof H Le-Minh - Northumbria University, UK  
 Prof W O Popoola - The Univ. of Edinburgh, UK  
 Prof J Yuan - Beijing Unive. of Posts & Telecomms, China  
 Prof G Farrell - Technological Unive. Dublin, IE  
 Prof J Zhou - Ningbo University, China  
 Prof S Korposh - Nottingham University, UK  
 Prof S Wan - Nanchang Hangkong University, China  
 Prof B Liu - Nanchang Hangkong University, China  
 Dr Q Wu - Northumbria University, UK  
 Dr M Ijaz - Manchester Metropolitan Univ., UK

#### Special Session

Prof W Gappmair and F Teschl - Graz Unive. of Techn., AT  
 Prof B W-K Ling - Guangdong Unive. of Technology, CN  
 Prof S Shioda - Chiba University, JP  
 Prof F Falcone - Unive. Publica de Navarra, ES  
 Prof A Panagopoulos - National Techn. Unive. of Athens, GR  
 Prof J Rabadan - IDETIC-Unive. of Las-Palmas Gran Canary, ES  
 Prof D Castanheira - Instituto de Telecomunicações, PT  
 Prof A Silva - University of Aveiro, PT  
 Prof A Gameiro - University of Aveiro, PT  
 Prof S Sen - Hacettepe University, TR  
 Prof C Masouros - University College London, UK  
 Prof I Dayoub - Polyt. Hauts-de-France, FR  
 Prof M Julia Garcia - Carlos III University of Madrid, SP  
 Dr Marco Gomes - University of Coimbra, IT  
 Prof Rui Dinis - Nova University of Lisbon, IT, PT  
 Dr S Rajbhandari - Strathclyde University, UK  
 Drs H Fontes and H P Oliveira - INESC TEC, PT  
 Dr K Mikhaylov - Univ. of Oulu, FI  
 Dr Y Deng - King's College London, UK  
 Dr L M Pessoa - INESC TEC, PT  
 Dr N Paulino - FEUP, PT  
 Dr Q Luo - Unive. of Hertfordshire, UK

### Colloquium

- 9<sup>th</sup> Colloquium on Optical Wireless Communications
- 2<sup>nd</sup> Colloquium on Optical Fiber Devices and Sensing applications

### Special Session

- AI for Wireless Network Modeling and Optimization
- Cognitive Cities: Beyond the Smart City Concept
- RISs for Communication and Sensing
- Satellite and Space Communications
- Signal Processing, Machine Learning and Communications for Personal Health Monitoring
- Signal Processing, Sensing & Communication for Connected & Automated Vehicles
- Teletraffic Models, Traffic Engineering & Network Optimization
- Security & Trust in Radio Access Networks
- Advancements & Emerging Trends in Cyber Security
- Integrated sensing and communications for 6G
- Massive MIMO and millimeter Wave Communications
- Emerging Technologies for Wireless Early Warning Systems

Papers are solicited from, but not limited to the following topics:

#### Communications Systems & Theory

Adaptive modelling  
 Antennae  
 Chip design for communications  
 Coding theory & techniques  
 Communications for disaster management  
 Modulation/Demodulation  
 Fading channels  
 Filtering techniques  
 Radio/microwave/millimetre wave comms.  
 Noise reduction  
 Synchronization  
 Transmission diversity  
 Satellite & space communications

#### Communications Protocols

Communication standards  
 Internet communications  
 Internet protocols  
 IP over ATM  
 Routing protocols  
 Transport control protocols

#### Networks & Network Management

Bandwidth management and Buffering

#### Photonics

Free space optics  
 Wireless communications  
 High-speed devices for photonics  
 Optical buffering  
 Optical fibre communications  
 Optical MEMS for lightwave networks  
 Optical routing/Photonic networks  
 Optical signal processing  
 Optical switching  
 Radio over fibre & FSO

#### DSP

Adaptive signal processing  
 Digital & multirate signal processing  
 DSP algorithms & applications  
 DSP implementation  
 Multidimensional signal processing  
 Optical signal processing  
 Signal processing for storage  
 VLSI for communications & DSP  
 AI for health, smart urban environments, assistive technologies

#### Wireless Networks & Devices

### CSNDSP2024 General Information

Contact: Dr Anna Maria Vegni - Local Organising Committee Chair: Email: [annamaria.vegni@uniroma3.it](mailto:annamaria.vegni@uniroma3.it)

Dr S Matos - *IT Lisboa, PT*  
Dr S S-H Ling - *University of Technology Sydney, AU*  
Dr B Tan - *Tampere University, FI*  
Dr S Yoo - *Coventry University, UK*  
Dr I Moscholios - *University of Peloponnese, GR*  
Dr V Vassilakis - *Unive. of York, UK*  
Dr K Rabie - *Manchester Met Unive., UK*  
Dr R Alrawashde - *Mutah University, Jordan*  
Dr M Benjillali - *INPT, Morocco*  
Dr A Hasanat - *Alhussein Bin Talal University, Jordan*

#### International Technical Advisory Committee

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Dr I Soto, *Santiago Univ., Chile*  
Dr H A Suraweera, *Univ. of Peradeniya, Sri Lanka*  
Dr J Tang, *Bangor University, UK*  
Prof H Takruri, *Univ. of Salford, UK*  
Dr V G Vassilakis, *Univ. of York, UK*  
Dr P Zwierzykowski, *Poznan Univ. of Tech., Poland*

Channel allocation  
Congestion & admission controls  
Digital integrated services  
Intelligent networks  
Modelling and simulation techniques  
Network management  
QoS, reliability & performance modelling  
Queueing theory  
Regulatory issues  
Routing issues & multicasting  
Security & privacy  
Signalling, traffic control, etc.  
Communications for sustainability and green energy.  
Smartphones/Home networks/Residential Gateways  
Internet of things for smart living and e-health  
Middleware support for smart home and health telematics services

5G network evolution  
Ad-hoc & Sensor networks  
Disconnected & weakly connected operation  
Interworking wireless & wireline networks  
Location-based Services & positioning  
MEMO & FORM systems  
Mobile agents  
Mobile computing for e-commerce  
Mobility management  
Multimedia & broadband services  
Multimedia QoS support & middleware  
Performance of end-to-end protocols  
Proxies & middleware  
Roaming  
System-level energy management  
Transport layer issues  
Wireless broadband mobile access  
Wireless LAN/WAN  
Wireless/mobile networked  
Wearable sensors/integrated micro-nano systems/home health monitoring

- Papers may be presented in the form of **Oral presentations and/or Posters.**
- Contributions by **MPhil/PhD** research **students** are particularly encouraged.

#### Submission Dates

- **Full paper: 1 March. 2024**
- **Notification of acceptance: 14 April 2024**
- **Camera-ready: 30 April 2024**
- **Registration & payment: until 31 May 2024**

#### Submission & Publication Details

- Electronic submission ONLY, through: <http://edas.info>
- All papers will be reviewed by at least three referees
- The manuscripts must fit IEEE conference template for publishing at IEEE-Xplore
- All papers will be published in the conference proceedings
- Selected papers will be published in special issues of journals (**to be announced**)

#### Registration Details

- Full registration
  - IEEE/IET Member – 450€
  - Non-IEEE/IET Member – 550€
- Student registration
  - IEEE/IET Member – 350€
  - Non-IEEE/IET Member – 450€
- Registration covers social events, lunches, coffee breaks, and paper processing charges
- Early bird registration from 31st of March to 31st of May
- Late registration after 31st of May will incur in a penalty of 100€.

#### The City of Rome

Rome's history spans 28 centuries. While Roman mythology dates the founding of Rome at around 753 BC, the site has been inhabited for much longer, making it a major human settlement for almost three millennia and one of the oldest continuously occupied cities in Europe.

For further information visit:

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