

## Day 1: October 11, 2022

### 9:30 - 10:00: Coffee and registration

ICUMT and FOAN participants

#### SESSION 1.1. Plenary session / The main room

Note: All presentations will be performed in physical form

10:00 - 10:15: *Greetings from sponsors and organizers,*

10:15 - 11:00 Invited talk

*IoT-edge-cloud continuum a Tactile Internet approach*

**Carlos Palau**, Universitat Politècnica de Valenci, Spain

11:00 - 11:45 Invited talk

*"Multidimensional optical multiplexing for secure access optical networks"*

Prof. **Gabriella Cincotti**, University of Rome, Italy

Q&A: 15 minutes for both talk

### 12:00 - 13:00 Lunch break

#### SESSION D1.2: Photonics in telecom networks

FOAN Room

13:00 - 13:30 Invited talk

*"Challenges of Terrestrial to Satellite Communications: Optical & Timing Consideration"*

**Tracey Vanik**, Head of Photonics Market Research at EPIC, US;

NOTE: Only one online talk at FOAN2022

13:30 14:00 Invited talk

*"Programmable photonics hardware for low power consumption networks",*

**Ana Gonzales**, Director of Strategic Partnerships, iPRONICS, Spain;

13:30 - 14:10 Panel Discussion

*"Photonic Integrated Circuits in Passive Optical Networks"*

Panelists: **Claudio Porzi**, Scuola Superiore Sant'Anna, Italy  
**Daniel Perez Lopez**, CTO and cofounder of iPRONICS, Spain  
**Bostjan Batagalj**, University of Ljubljana,

Moderated by **Adrian Torregrosa**, Universidad Miguel Hernandez, Spain

## 15:00- 15:30 Coffee

FOAN participants

### SESSION D1.3: Research issue

Note: All presentation will be in physical form except the last (Taiwan strong Covid restriction)

15:30 - 15:50 Regular paper

**"Frequency and Bandwidth Tunable Integrated Microwave Photonic Bandpass Filter"**

**Claudio Porzi**, Scuola Superiore Sant'Anna, Italy

15:50 - 16:05 Regular paper

**"Coexistence Studies for DV-QKD Integration in Deployed RAN Infrastructure"**

**Argiris Ntanos**, National Technical University of Athens, Greece

16:05 - 16:20 Regular paper

**"Performance Analysis of Mode Division Multiplexing (MDM) Based Hybrid PON FSO System Under Fog Weather Conditions"**

**Rajan Miglani**, Lovely Professional University, India, India

16:20 - 16:40 Regular paper

**"Stabilization concept for maintaining maximum suppression of the undesired sideband in radio-over-fiber link using a single add/drop micro-ring resonator"**

**Kristjan Vuk Baliz**, University of Ljubljana, Slovenia

16:40 - 17:00 Regular paper

**"Hybrid PONs with RU Interconnection for Future Mobile Networks"**

**Lung-Wei Chung**, National Taiwan University of Science and Technology, Taiwan

## 20:00 - Welcome reception

Rooms: The location will be determined later

## Day 2: 11. October 2022

### 09:00 - 9:30 Coffee - Registration

FOAN participants

#### 9:30 - SESSION D2.1: TELECOM

Note: All presentations will be performed in physical form

09:30 - 10:30 Operator talk

**"GPON / XGS-PON / NG-PON2 Evolution With a Comparison of Wi-Fi 6 Mesh Versus Wi-Fi 5 Mesh in a Residential Building - Experience in T-2"**

**Gorazd Penko**, Head of Reference Laboratory for development P2P/FTTH, xDSL, P2MP/FTTH, xDSL and CPE IAD, T-2 doo Slovenia

10:00 - 10:20 Invited talk

**"Challenges in Building Broadband Fiber Optic Infrastructure in Rural Areas "**

**Duško Žutić**, Program Leader, Roaming Networks, Croatia;

10:20 - 10:45 Invited talk

**"Software-Defined Passive Optical Network With Modular Optical Line Terminal",**

**dr. Jaqup Ratkocery**, Director, FTTx Networks at Technetix&UBT, Holland and Kosovo

#### SESSION D2.2: Regulation challenges in Access and IoT Networks

Note: All presentations will be performed in physical form,

10:45 - 11:10 Regular paper

**"Convergence of optical and radio access network"**

**Vesna Prodnik**, CEO, Vafer Ltd. Slovenia

11:10 - 11:35 Invited talk

**"Municipalities - new owners of Fiber Optic Networks in Europe"**

**Cornel Barbut**, Dare for Digital Infrastructure, Romania,

11:35 - 12:00 Invited talk

**"Data Generated by IoT: What Does the Regulation Say?"**

**Cristina Contero Almagro**, Partner en @ Aphaia , Spain

### 12:00 - 13:00 Lunch break

ICUMT and FOAN participants

**SESSION D2.3: SENSORS**

Note: All presentations will be performed in physical form

13:00 - 13:30 Invited talk

**"Ultrasensitive nanoplasmonic biosensor based on precisely controlled phase singularity"**  
dr. **Shuwen Zeng**, French National Centre for Scientific Research (CNRS), France;

13:30 - 14:00 Regular paper

**"An Energy Harvesting Technology for MPU-based IoT Device"**

**Hideaki Kimura**, Chubu University, Japan (retired Head of Access lab, NTT)

14:00 - 14:45 Tutorial

**"Diverse Optical Fiber Structures for Sensor Applications"**

prof. **Gerd Keiser**, Boston University & PhotonicsComm Solutions,

14:45 - 15:00 Regular paper

**"Two parameters detecting by using one Silicon core based fiber Bragg Grating"**

**Prof. Yi-Lin Yu**, Feng-Chia University, Taiwan

15:00 - 15:15 Presentation only

**"Thin-Film PV Cells in Powering Over Singlemode Fiber"**

Edvin Skaljo, BH Telecom&University of Sarajevo, Bosnia and Herzegovina

15:15 - **COFFEE & FOAN2022 CLOSING SESSION**

LOOKING forward to seeing you at FOAN2023

**20:00 GALA DINNER**

ICUMT and FOAN participants