WORKSHOPS AND SHORT COURSES WWW.EUMW.EU - 123

MONDAY 08:30 - 17:50

Photonic Technologies and Systems for RF **Applications**

Chair: Andreas Stöhr¹

Co-Chair: Guillaume Ducournau²

¹University Duisburg-Essen, ²Univ of LILLE

Today, most devices and technologies rely

on electronics to process, transmit, and

analyze information. This workshop will

address photonic RF technologies aiming

to transform these electronic connections

into photonic ones, increasing transmis-

sion speeds and improving responsiveness while consuming substantially lower levels of power. The key advantage of photonic

RF technology is the potential to provide a

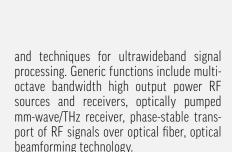
continuous and interference-free coverage of multi-octave frequency bands up to the

THz regime with only a single technological

solution paving the way for a plethora of

future applications, measurement technologies and metrology. Potential applications include high-capacity fixed wireless access, mobile mm-wave/THz communications, satellite communications, earth observation

Room: Juliana 1



The workshop will provide an insight into the state-of-the-art of photonic RF technologies, and it aims to discuss whether maturity, performance and cost of photonic RF technology is ready to compete with existing solutions.



PROGRAMME

Photonic Terahertz Vector Network Analyzer for High-Frequency Test and Measurement **Applications**

Taro Eichler

¹Rohde & Schwarz

THz photodiodes

Tom Neerfeld¹

Broadband RF photonics systems enabled by dielectric waveguide technology

Guillermo Carpintero¹

¹UC3M

Antenna-coupled terahertz optical modulators using electrooptic polymer waveguides

Takahiro Kaji

Photonic Terahertz Systems and their Use as High Frequency Measurement Equipment.

Nico Vieweg 1 ¹TOPTICA

RF over Fiber for Satellite Communications and Earth Observation

Yilmaz Uçar¹

THz photonics for system-level testing

Guillaume Ducournau¹

Ultra-high stable laser source for microwave photonics and THz

Samir Kassi

Univ Grenoble Alpes & KAPAH Company

Antennas and Packaging for Multiuser Sub-THz Wireless Communication

Thomas 7wick 1

V-Band Optoelectronic Oscillator for Earth Observation Applications

Dimitrios Kastritsis 1

*University of Cynrus

Laser Sources Architectures for Classical and Quantum RF and Optical Sensing"

Daniel Dolfi¹

¹THALES

THz transistors

Peter Huggard 1

¹Rutherford Appleton Labs