SUNDAY 08:30 – 17:50

WS02
EuMC

Polymer Microwave Fiber (PMF) Communication for sub-THz, Low-Cost High Data Rate Short-Range Systems

Chair: Frida Strömbeck[1]
Co-Chair: Herbert Zirath[1]
[1]Chalmers University

Room: Mission 2

The recent development of high frequency semiconductor processes has enabled mm-Wave technologies to take advantage of the large bandwidths available at these frequencies (100-300 GHz) to achieve ultra-high data rates. One drawback is the corresponding larger free space path loss (FSPL), which can be compensated for by using high gain antennas. However, that will lead to a very directive link and lose its flexibility.
Polymer Microwave Fiber (PMF) is a promising alternative to use for these short-range communication links (less than 10 meters). It's a robust, low-cost solution which can support data rates exceeding 100 Gbps. These links are essential to future intra-box/module-to-module/in-cabin vehicle communication for example.
This workshop will cover recent developments in PMF design, interconnects and technologies for the PMF systems. State-of-the-art PMF communication links and breakthrough systems will be presented, as well as novel and promising future applications.

PROGRAMME

CMOS based circuits for high datarate PMF-links
Patrick Reynaert[1]
[1]KU Leuven

BiCMOS based high datarate PMF-links in D-band and H-band
Frida Strömbeck[1], Herbert Zirath[1]
[1]Chalmers University

Recent D and H-band PMF links
Jose Luis Gonzalez-Jimenez[1]
[1]CEA Leti

D-band Transition to PMFs and insight towards H-band
Laurent Petit[1]
[1]Radiall

D- and H-band PMF coupler integration in eWLB package
Maciej Wojnowski[1]
[1]Infineon

Recent advances in PMFs for high datarate communication
Maria Jozwicka[1]
[1]H&S

Applications of PMF-links for telecommunication systems
Sining An[1]
[1]Ericsson AB

Broadband Sub-THz Dielectric Waveguides
Samir Lagoug[1]
[1]IMS