Photonics in Switching and Computing

19 - 21 September, 2018

Workshop on Optical Fronthaul and Backhaul Technologies for 5G Networks

Co-located with IEEE PSC2018 in Limassol, Cyprus

18th September 2018

Objectives:

- To highlight the advances in optical and networking technologies for 5G front and backhaul in the second phase of 5G PPP and to set them into a global context.
- To foster collaboration between the involved projects and identify common goals and approaches.

Committee:
Simon Rommel (chair), TU/e, blueSPACE
Chris Vagionas, AUTH, 5G PHOS
Jim Zou, ADVA, 5G-PICTURE
Chigo Okonkwo, TU/e, Metro-Haul

Speakers:

Chris Vagionas, AUTH, 5G PHOS
Pham Tien Dat, NICT, Japan
Andreas Stöhr, University of Duisburg Essen
Simon Rommel, TU/e, blueSPACE
Jörn Epping & Ruud Oldenbeuving, LioniX International
Anna Tzanakaki, University of Bristol, 5G-PICTURE
Chathurika Ranaweera, University of Melbourne
Arash Farhadi Beldachi, University of Bristol
Jim Zou, ADVA Optical Networking, 5G-Xhaul/5G-PICTURE
Chigo Okonkwo, TU/e, Metro-Haul
Evangelos Grivas, Eulambia, blueSPACE

Programme:

Time	*Speaker*	*Title*
9:30am – 9:45am	Simon Rommel *TU/e*	Opening and Welcome
9:45am – 10:15am	Chigo Okonkwo *TU/e*	The evolution of optical networks in the coming 5G Era
10:15am – 10:45am	Jim Zou *ADVA Optical Networking*	Advanced Optical X-haul Technologies for 5G Networks
10:45am – 11:15am	Arash Farhadi Beldachi *University of Bristol*	Provision jointly optical Backhaul and Fronthaul services
11:15am – 11:30 am	Coffee Break	
11:30am – 12:00pm	Chathurika Ranaweera *University of Melbourne*	Design and Planning of Optical Transport Network for 5G and Beyond
12:00pm – 12:30pm	Anna Tzanakaki *University of Bristol*	Converging Optical wireless and DC networks: The 5G-PICTURE approach
12:30pm – 1:00pm	Andreas Stöhr *University of Duisburg Essen*	Optical Fronthaul/Backhaul Technologies for a Multi-RAT (WiFi, LTRE, 60 GHz 5G) Mobile Network
1:00pm – 1:30pm	Pham Tien Dat *NICT Japan*	Convergence of Fiber-Optic and Radio-Wave for Future Mobile Fronthaul and Backhaul Systems
1:30pm – 2:30pm	Lunch	
2:30pm – 3:30pm	Christos Vagionas *AUTH*	5G mmWave networks exploiting high-capacity A-RoF links and Medium Transparent MAC protocol for high density environments: The 5G-PHOS approach
3:00pm – 3:30pm	Simon Rommel *TU/e*	Space Division Multiplexing 5G Fronthaul with Analog and Digital Radio-over-Fiber and Optical Beamforming – the blueSPACE Approach
3:30pm – 4:00pm	Jörn Epping *LioniX International*	Integrated Microwave Photonic Beamformers for 5G applications
4:00pm – 4:30pm	Evangelos Grivas *Eulambia*	Analogue Radio Over Fiber Baseband Processing Units for 5G and Beyond
4:30pm – 4:45pm	Christos Vagionas *AUTH*	Closing