

THURSDAY, 19.05.2016

19.00–22.00 Welcome reception

FRIDAY, 20.05.2016

08.00–09.00 Coffee

09.00–10.30 **ECIO + OWTNM PLENARY JOINT SESSION 1.01 + 2.01**

CHAIR: Trevor M. BENSON, University of Nottingham, UK

09.00–09.30 **ECIO|I-25** | INVITED TALK | Andrea Melloni, **Tunable integrated photonics toolbox: from realistic models to control algorithms**

09.30–10.00 **ECIO|I-26** | INVITED TALK | Philippe Lalanne, **Light interaction with resonance**

10.00–10.30 **OWTNM|I-01** | INVITED TALK | Wim Bogaerts, **Challenges for Designing Large-scale Integrated Photonics**

10.30–11.00 Coffee break

11.00–13.00 **ECIO + OWTNM SESSION | SIMULATIONS/MODELLING 4.04 + 4.05**

CHAIR: Andrea MELLONI, Politecnico di Milano, Italy

11.00–11.15 **ECIO|O-43** | Mariangela Giovannini, **Analysis of Quantum Dot Single Section FP Lasers for Comb spectra generation**

11.15–11.30 **ECIO|O-44** | Daan Lenstra, **Rate-Equation Analysis for an Integrated Coupled-Cavity Laser with MMI Anti-Phase Coupler**

11.30–11.45 **ECIO|O-45** | Giannis Pouloupoulos, **Angled 3D Glass-to-SiPh adiabatic coupler**

11.45–12.00 **ECIO|O-46** | Wim Bogaerts, **Optimization of Silicon Photonic Components using Multi-Fidelity Simulations and Co-Kriging**

12.00–12.15 **ECIO|O-47** | Perry van Schaijk, **Feedback-Insensitive Integrated Laser**

12.15–12.30 **OWTNM|O-01** | Alonso Millan Mejia, **Design of an Optical Nanoantenna with Focusing Sub-wavelength Grating Couplers and Metallic Reflector**

12.30–12.45 **OWTNM|O-02** | Vipul Rastogi, **Effect of Dielectric Nanoparticles on Efficiency of Organic Solar Cell**

12.45–13.00 **OWTNM|O-03** | Gregory V. Morozov, **Band Structure Analysis of a 1D Photonic Crystal with a Sawtooth Refractive Index**

13.00–14.30 Lunch

14.30–16.00 **OWTNM SESSION #1 | OPTICAL ARRAYS, GRATINGS AND VIAS 4.04 + 4.05**

CHAIR: Gregory MOROZOV, University of the West of Scotland, UK

14.30–15.00 **OWTNM|I-02** | INVITED TALK | Anatole Lupu, **Local Parity-Time-symmetry Grating Devices for Integrated Optics**

15.00–15.15 **OWTNM|O-04** | Trevor M. Benson, **Time-Modulated Gain and Loss Parity-Time Symmetric Resonators**

15.15–15.30 **OWTNM|O-05** | Ya Yan Lu, **Plane Wave Diffraction by Periodic Arrays of Nonlinear Cylinders**

15.30–15.45 **OWTNM|O-06** | Nadège Rassem, **On the Thin Spectral Width of Cavity-resonator-integrated grating filters**

15.45–16.00 **OWTNM|O-07** | Ripalta Stabile, **Design of an Optical Via for Large Scale Monolithic Multilayer PICs**

16.00–16.45	POSTER SESSION 4th floor, hall
	OWTNM p-01 Anna Piotrowska, Strain Detection in Two- and Three-Dimensional Periodic Structures with the Low Index Contrast by Monitoring their Optical Response
	OWTNM p-02 Anne-Laure Fehrembach, Electromagnetic modelling of large subwavelength-patterned highly resonant structures
	OWTNM p-03 Jan Fiala, On the Origin of the Wood's anomalies in the Extraordinary Transmission through One-dimensional Sub-wavelength Periodic Arrays
	OWTNM p-04 Olga Kuryzheva, Resonances Excited by an Airy Pulse in a Dielectric Layer
	OWTNM p-05 Nadiia Stognii, Transient Plasmons Dynamics in Metallic Structures
	OWTNM p-06 Tomek Kaczmarek, Dispersion and loss managed soliton communication system with use of new type of step-index optical fiber
	OWTNM p-07 Beata Derkowska-Zielińska, Third Order Nonlinear Optical Properties of DCM
	OWTNM p-08 Hanna Stawska, The Numerical Prediction of the Characteristics of Directional Multimodal Couplers for Two-Photon Endoscopy
	OWTNM p-09 Lukasz Pajewski, Ray Tracing Methods in Numerical Analysis of Double-clad Microstructured Optical Fibre Coupler
	OWTNM p-10 Eliza Miśkiewicz, Analysis of the Absorption and Refraction Spectra of Photorefractive GaAs – AlGaAs Heterostructures for Dynamic Diffractive Elements
	OWTNM p-11 Vladimir Burdin, Model for a Few-Mode Nonlinear Propagation of Optical Pulse in Multimode Optical Fiber

16.45–18.15	OWTNM SESSION #2 PLASMONICS 4.04 + 4.05 CHAIR: Manfred HAMMER, University of Paderborn, Germany
16.45–17.00	OWTNM O-08 Pavel Kwiecien, Simulations of sensing capabilities of propagating modes supported by a sparse array of metal nanoparticles
17.00–17.15	OWTNM O-09 Gilles Rosolen, Doping and connecting graphene dimers for a tunable absorption spectrum
17.15–17.30	OWTNM O-10 Thomas Christopoulos, Optical Bistability and Self-Pulsation with Long-Range Hybrid Plasmonic Disk Resonators
17.30–17.45	OWTNM O-11 Gilles Renversez, Improved nonlinear plasmonic waveguides: modal spatial transitions and loss reduction
17.45–18.00	OWTNM O-12 Hung-chun Chang, Leaky and Bound Modes on Stripe Plasmonic Waveguide Related Structures
18.00–18.15	OWTNM O-13 T. V. Raziman, Detecting weak modes in plasmonic systems using complex polarisation charge
19.30–24.00	Grill dinner LOLEK PUB (Pole Mokotowskie), ul. Rokitnicka 20

SATURDAY, 21.05.2016	
08.00–09.00	Coffee
09.00–10.30	SESSION #3 WAVEGUIDE BASED DESIGN 4.04 + 4.05 CHAIR: Anne-Laure FEHREMBACH, Aix-Marseille Université, CNRS, France
09.00–09.15	OWTNM O-14 Manfred Hammer, Hybrid Coupled Mode Modelling
09.15–09.30	OWTNM O-15 Hannes Lüder, Coupled-Mode Theory for Complex-Index, Corrugated Multilayer Stacks
09.30–09.45	OWTNM O-16 Igor Lyubchanskii, Optical Properties of a Four-Layer Waveguiding Nanocomposite Structure in the Near-IR Regime
09.45–10.00	OWTNM O-17 Christoph Wächter, Low Loss Estimation in Thin Film Configurations by Means of Leaky Wave Resonances
10.00–10.15	OWTNM O-18 Yufei Xing, Backscatter Model for Nanoscale Silicon Waveguides
10.15–10.30	OWTNM O-19 Jon Ø. Kjellman, Design of Dual Layer, Dual Width Waveguides for Giant Group Velocity Dispersion

10.30–11.00	Coffee break
11.00–13.00	SESSION #4 PHOTONIC DESIGN 4.04 + 4.05 CHAIR: Christoph WÄCHTER, Fraunhofer Institute for Applied Optics and Precision Engineering, Jena, Germany
11.00–11.15	OWTNM O-20 Lukasz Sójka, Numerical Investigation of Mid-infrared Laser Action in Pr³⁺ Doped Chalcogenide Fibre Laser
11.15–11.30	OWTNM O-21 Ł. Scholtz, Numerical Investigation of All-Optical Switching in Nonlinear Chalcogenide Fibre Bragg Gratings due to Cross-Phase and Self-Phase Modulation
11.30–11.45	OWTNM O-22 Marian Marciniak, Analysis of Single-Frequency Radiation from Fiber Laser with Bragg Reflectors: Numerical Simulation by the Method of Single Expression
11.45–12.00	OWTNM O-23 Anton Bourdine, Design of Silica Few-Mode Optical Fibers with Enlarged Core Diameter
12.00–12.15	OWTNM O-24 Vipul Rastogi, Six-mode-group Fiber Amplifier for SDM System
12.15–12.30	OWTNM O-25 Libor Ladányi, Numerical Simulation of the Dispersion-Managed Soliton Pulse Propagation
12.30–12.45	OWTNM O-26 Sergei Mingaleev, VPImodeDesigner: An Integrated Framework for Modeling Optical Waveguides and Fibers
12.45–13.00	OWTNM O-27 Alberto Parini, Design Space Exploration of Functional Blocks for On-chip Mode Division Multiplexing
13.00–14.00	Lunch ground floor, hall
14.00–15.30	SESSION #5 ANALYSIS, THEORY AND MODELLING 4.04 + 4.05 CHAIR: Marian MARCINIAK, National Institute of Telecommunications, Poland
14.00–14.30	OWTNM I-03 INVITED TALK Daryl Beggs, Polarisation singularities in disordered photonic crystal waveguides for on-chip spin-photon entanglement
14.30–14.45	OWTNM O-28 Alberto Parini, Two-mode Waveguide with Nonlinear Ring Resonator
14.45–15.00	OWTNM O-29 Martina Gerken, Simulation Methods for Multiperiodic and Aperiodic Nanostructured Dielectric Waveguides
15.00–15.15	OWTNM O-30 Eugene Sokolov, High-Order Split-Step Time-Domain Modelling of Optoelectronic Devices with Distributed Feedback
15.15–15.30	OWTNM O-31 Hendrik Kleene, An Assessment of Polynomial Approximations for the Time-Domain Beam Propagator
15.30–16.00	Closing remarks 4.04 + 4.05