Tuesday April, 8, 2025

8:30 AM - 09:10 AM	**Registration**
9:10 AM – 09:15 AM	**Welcome Address**
09:15 AM - 10:15 AM	**Session 1** Chair: **Peter Bienstman** **9:15 AM - 9:45 AM Antonio Hurtado:** Photonic spiking neurons and spiking neural networks for light-enabled neuromorphic computing and sensing **9:45 AM – 10:00 AM Wendy Otieno:** Three-neuron neuromorphic circuit composed of diffusive memristors **10:00 AM - 10:15 AM Jordan McConnell:** Data-driven control of high-power states in mode-locked lasers with reinforcement learning
10:15 AM – 11:00 AM	**Coffee Break**
11:00 AM - 12:00 PM	**Session 2** Chair: **Allard Mosk** **11:00 AM - 11:15 AM Moritz Riedel:** Radiative and lateral losses in finite-size deep-UV Photonic Crystal Surface Emitting Lasers **11:15 AM - 11:30 AM Moritz Riedel:** Comparison of Coupled Wave Theory and Guided Mode Expansion for Photonic Crystal Surface Emitting Lasers with Hexagonal Lattice **11:30 AM - 11:45 AM Ben Lang:** Mode Switching in Photonic crystal Surface Emitting lasers **11:45 AM - 12:00 PM Shiang-Yu Huang:** Designing compact vertical on-chip coupler with bottom reflector using topology optimization
12:00 PM - 1:00 PM	**Lunch Break**

1:00 PM - 2:15 PM	**Session 3** Chair: **Alessia Pasquazi** **1:00 PM - 1:30 PM Viktor Myroshnychenko:** Efficient modelling of nonlinear wavefronts in dielectric metasurfaces **1:30 PM - 1:45 PM Gregor Tanner**: A Non-diffractive Resonant Angular Filter **1:45 PM - 2:00 PM Anne-laure Fehrembach:** Second harmonic generation in cavity-resonator integrated grating couplers **2:00 PM - 2:15 PM Nicolas Lebbe:** Asymptotic homogenization of Mie-resonant metasurfaces
2:15 PM - 3:00 PM	**Tea Break**
3:00 PM - 4:15 PM	**Session 4** Chair: **Olivier J.F. Martin** **3:00 PM - 3:30 PM Alexander Nosich:** Full-wave electromagnetic engineering of threshold conditions for plasmonic micro and nano lasers with patterned-graphene resonators **3:30 PM - 3:45 PM Jérémy Itier:** Nonlinear slab: rigorous modelling of the scattering vector problem **3:45 PM - 4:00 PM Maike Lenz:** Coupled-mode theory modelling of fibre bragg gratings in multimode fibers for imaging applications **4:00 PM - 4:15 PM Ali Pour Mohammad Qoli Vafa:** Reciprocal space optimization of light trapping for solar absorbers
4:30 PM - 5:30 PM	**Welcome Reception and Networking**

Wednesday, April 9, 2025

8:30 AM - 9:00 AM	**Registration**
9:00 AM - 10:15 AM	**Session 5** Chair: **Francesco Ferranti** **9:00 AM - 9:30 AM Peter Bienstman:** Neuro-inspired time-series processing with silicon integrated photonics **9:30 AM - 9:45 AM Simone Ferraresi:** Performance evaluation of lithium niobate-based reconfigurable photonic switches **9:45 AM - 10:00 AM Hussein Talib:** Photonic matrix multiplication using double racetrack resonators lattice **10:00 AM - 10:15 AM Anne-laure Fehrembach:** Design of transmission cavity resonator integrated grating filters
10:15 AM - 10:45 AM	**Coffee Break**
10:45 AM - 12:00 PM	**Session 6** Chair: **Ana Vukovic** **10:45 AM - 11:15 AM Professor David Marpaung:** Brillouin optomechanics in scalable photonic integrated platforms **11:15 AM - 11:30 AM Andrew Cooper:** Parametric interaction of laser cavity-solitons with an external cw pump **11:30 AM - 11:45 AM Aadithya Suresh:** Hysteresis in laser cavity-solitons **11:45 AM - 12:00 PM Vittorio Cecconi:** Spatiotemporal engineering of terahertz pulses in disordered media
12:00 PM - 1:00 PM	**Lunch**

1:00 PM - 2:15 PM	**Session 7** Chair: **Alexander Nosich** **1:00 PM - 1:30 PM Alessia Pasquazi:** Self-emergence of laser cavity solitons in microcombs: the role of slow nonlinearity **1:30 PM - 1:45 PM Tom Sheppard:** Universal topological localisation in time from parity-time-reversal symmetry **1:45 PM - 2:00 PM Almut Beige:** Local photons and the momentum of light **2:00 PM - 2:15 PM Ya Yan Lu:** Super-bound states in the continuum in a simple grating
2:15 PM - 3:00 PM	**Tea Break**
3:00 PM - 4:15 PM	**Session 8** Chair: **Viktor Myroshnychenko** **3:00 PM - 3:30 PM Olivier J.F. Martin:** Lattice resonances in plasmonic systems **3:30 PM - 3:45 PM Parmenion Mavrikakis:** Self-Consistent Modeling of Coupled Maxwell-Rate Equations with the Finite-Difference Time-Domain Method **3:45 PM - 4:00 PM Roman Gelly:** Numerical modeling of time-modulated metasurfaces with a Discontinuous Galerkin method **4:00 PM - 4:15 PM Brian Stout:** Resonant state formulations for Wave-guide response functions
6:30 PM - 9:30 PM	**Conference Dinner at the Crowne Plaza Nottingham**

Thursday April 10, 2025

8:30 AM - 9:00 AM	**Registration**
9:00 AM - 10:15 AM	**Session 9** Chair: **David Marpung** **9:00 AM - 9:30 AM Allard Mosk:** Programmed all-optical switching in a multistable photonic molecule **9:30 AM - 9:45 AM Manfred Hammer:** Guided modes of integrated optical thin-film lithium niobate channels **9:45 AM - 10:00 AM Abhishek Paul:** Towards 4-Dimensional Terahertz Near-Field Tomography **10:00 AM - 10:15 AM Matt Lovell:** Maximising the Benefits of Membership
10:15 AM - 10:45 AM	**Coffee Break**
10:45 AM - 12:00 PM	**Session 10** Chair: **Antonio Hurtado** **10:45 AM - 11:15 AM Lina Jaurigue:** Noise induced modulations in the pulse arrival times of passively mode-locked semiconductor lasers with optical feedback **11:15 AM - 11:30 AM Jacob Seifert:** Optimizing illumination for precise multi-parameter estimation in coherent diffractive imaging **11:30 AM - 11:45 AM Callum Wilson**: Recovering optical fibre transmission matrices from partial measurements **11:45 AM - 12:00 PM Gleb Anufriev:** Photonic Reservoir Computing: From Principles to Neuromorphic Sensing
12:00 PM - 1:00 PM	**Lunch**

1:00 PM - 2:15 PM	**Session 11** Chair: **Lina Jaurige** **1:00 PM - 1:30 PM Francesco Ferranti:** Adaptive wavelength sampling and machine learning in nanophotonics **1:30 PM - 1:45 PM Gervasio Adriano D'Anzieri:** Multi-objective optimization of a large-area silicon grating coupler **1:45 PM - 2:00 PM Dan-Nha Huynh:** Inverse metalens design and simulation **2:00 PM - 2:15 PM Oliver Kuster:** Inverse design of 3d nanophotonic devices feasible for additive manufacturing
2:15 PM - 2:30 PM	**Final Remarks and Close**