

| Date          | 22/04/2024   |  |                     |             |
|---------------|--|--|---------------------|-------------|
| Time          | Conference room A  | Conference room B  | Conference room C   | Dining Room |
| 9:00 - 11:00  | Registration   |  |                     |             |
| 11:00 - 11:10 | Opening Remarks by Yann Amouroux   |  |                     |             |
| 11:10 - 11:50 | Keynote - Dr Rodrigo Benevides - Toward a quantum computer network   |  |                     |             |
| 11:50 - 12:15 |  |  |                     | Coffee      |
| 12:15 - 12:40 | Industry - Dr Alison McLeod - Photonics in Scotland  |  |                     |             |
| 12:40 - 12:45 |  |  |                     |             |
| 12:45 - 13:10 | Industry - Dr Kirsty Annand - Beyond Academia: Navigating Career Options After Your PhD  |  |                     |             |
| 13:10 - 14:00 |  |  |                     | Lunch       |
| 14:00 - 14:40 | Keynote - Prof Giovanni Volpe - Deep learning for microscopy and brain connectivity  |  |                     |             |
| 14:40 - 14:45 |  |  |                     |             |
| 14:45 - 15:10 | Industry - Prof Thomas Volz - Quantum-cascade correlation spectroscopy of fiber cavity exciton-polaritons  |  |                     |             |
| 15:10 - 15:15 |  |  |                     |             |
| 15:10 - 15:50 | Keynote - Dr Nirmal Mazumder - Multimodal nonlinear optical microscopy for biomedical applications   |  |                     |             |
| 15:50 - 16:15 |  |  |                     | Coffee      |
| 16:15 - 16:55 | Keynote - Prof Mehul Malik - High-dimensional quantum technologies: Harnessing structured light for the quantum networks of tomorrow   |  |                     |             |
| 16:55 - 17:55 | Panel: EDI in Photonics and Optics - Alison McLeod, Kirsty Annand, Yann Amouroux, Rodrigo Benevides  |  |                     |             |
| 17:55 - 18:00 |  |  |                     | Coffee      |
| 18:00 - 20:00 | Posters and Networking   |  |                     |             |
| 23/04/2024    |  |  |                     |             |
|               | Quantum Computing and information (Chair - Shivani Bisht)  | Biophotonics and sensing and medical optics (Chair - Nirmal Raj)   |                     |             |
| 09:00 - 09:15 | Thomas Boullier - Time-resolved second harmonic generation on Cu2O Rydberg excitons  | Marianna Leite De Avellar - Use of Scattered Light Integrating Collector (SLIC) for rapid screening of antimicrobial photodynamic therapy on Staphylococcus aureus             | Industry Show floor |             |
| 09:15 - 09:30 |  | Dorian Urban - Optical Coherence Tomography with Opto-Electronic Reference Arm   | Industry Show floor |             |
| 09:30 - 09:45 | Russel Brooks - Quantum-safe distributed sensing   | Vanya Metodieva - Combining super-resolution microscopy and optogenetics to dissect the multifaceted toxic pathways induced by amyloidogenic aggregates in neuroglial networks | Industry Show floor |             |
| 09:45 - 10:00 | Max Wells-Pestell - Optimisation of weighted graphs using neutral atom arrays  | Jakub Bělin (Cancelled) - A Robust Algorithm for an Incoherent Image Reconstruction through a Strongly Scattering Medium   | Industry Show floor |             |
| 10:00 - 10:30 | Christiaan Bekker - Quantum Memories at Scale: Developing On-chip Architectures based on Solid-state Colour Centres in Silicon Carbide for Translation to Quantum Technologies | George Dwapanyin - Non-invasive assessment of the developmental potential of embryos using digital holographic microscopy  | Industry Show floor |             |
|               |  |  | Industry Show floor |             |
| 10:30 - 11:00 |  |  | Industry Show floor | Coffee      |
|               | Computational Imaging (Chair - Laurynas Valantinas)  | Metaoptics and laser design (Chair - Tomasz Plaskocinski)  |                     |             |
| 11:00 - 11:15 | Sergei Kurdiumov - Shape Classification of Objects Too Small to See  | Shuhao Wu - Free-Form shaped MWIR achromatic metalens  | Industry Show floor |             |
| 11:15 - 11:30 | Euan Millar - Enhanced Resolution Fluorescence Lifetime Imaging via Computational Data Fusion for High-Speed Cellular Electrophysiology Studies                                | Jianling Xiao - Flexible Holographic Metasurfaces for Curvature Sensing  | Industry Show floor |             |
| 11:30 - 11:45 | Matthias Aquilina - Event-Driven LiDAR with Dynamic Neuromorphic Processing  | Patrick Foley - Demonstration of Laser Coherent Beam Combination   | Industry Show floor |             |
| 11:45 - 12:00 | Laurynas Valantinas - Pipelined diagonal deconvolution of Airy light-sheet microscopy  | N/A  | Industry Show floor |             |
|               | Structured Light (Chair - Charli Hamilton)   | Nanophotonics (Chair - Andan Ghumro)   |                     |             |
| 12:00 - 12:15 | Liam King - Frequency-domain luminescence: a new way to study operating OLEDs  | Anindita Das - Investigation of a hybrid plasmonic graded enz metasurface  | Industry Show floor |             |
| 12:15 - 12:30 | Amin Din - Ultrafast Laser Processing: Restructuring the LHC Beam Screens In Situ  | Elise Burns - Smart Hole Design for Membrane Fabrication   | Industry Show floor |             |
| 12:30 - 12:45 | Morgan Facchin - Multiple scattering in speckle metrology: Miracle or Mirage?  | - Novel nonlinear interconnects based on low index materials   | Industry Show floor |             |
| 12:45 - 13:00 | Graham Bruce - Looking Through The Glass: Raman Spectroscopy of Concealed Samples in Sealed Containers Using Shaped Laser Light  | Emma McCormick - CW lasing in a self-assembled NaYF4:Yb3+, Tm3+ Upconverting Nanoparticle Microlaser   | Industry Show floor |             |
| 13:00 - 13:15 |  | Femy Francis - Fiber coupled CO2 sensors for trace gas detection using Photonic Crystal Waveguides   | Industry Show floor |             |
| 13:15 - 13:30 | Benjamin Butler - Structured light and light-atom interactions   | Charli Hamilton - Integrated Microresonators for Kerr Comb Generation  | Industry Show floor |             |
| 13:30 - 13:45 | Thomas Sayner - Charge photogeneration in high performance solar cells via hole transfer from acceptor aggregates  | Romuald Kilianski - Inverse design of repulsive Casimir-Polder forces  | Industry Show floor |             |
| 13:45 - 14:00 | N/A  | Adnan Ghumro - Waveguide optical modulators using an etchless Lithium Niobate on Insulator platform  | Industry Show floor |             |
| 14:00 - 15:00 |  |  | Industry Show floor | Lunch       |
|               | Biophotonics and sensing II (Chair - Chetna Taneja)  | Quantum Optics (Chair - Iain MacCuish)   |                     |             |
| 15:00 - 15:15 | Chandresh Sindal - Integration of Localized Surface Plasmon Resonance Sensors with Acoustofluidic Manipulation   | Raul Alvarez Mendoza - Harnessing the Hong-Ou-Mandel effect for ultrafast Fluorescence Lifetime Sensing  | Industry Show floor |             |
| 15:15 - 15:30 | Sagarika Mishra - Sensing technologies for inorganic ions and organic small molecules  | N/A  | Industry Show floor |             |
| 15:30 - 15:45 | Rebecca Craig - Shedding Light on Biological Processes: Optically Detected Magnetic Resonance with Nitrogen-Vacancy Centers  | Thomas Jones - Time-domain chiral rotational spectroscopy  | Industry Show floor |             |
| 15:45 - 16:00 | Soumyabrata Banik - Fluorescent drug analogues to study drug-target interactions in intact cells   | Zak Johnston - SI-tracible calibration of oscillating magnetic fields in ULF and VLF bands   | Industry Show floor |             |
| 16:00 - 16:15 | Filmon Kubrom - Imaging co-transcriptional RNA synthesis in real-time step by step and molecule by molecule  | Paul Catterson (Cancelled) - Quantum Simulations using Potassium 40  | Industry Show floor |             |
| 16:15 - 16:30 | Pietro Esposito - Protein aggregate size and structure-dependent clearance from the brain extracellular space  | N/A  | Industry Show floor |             |
| 16:30 - 18:00 | Posters/Industry Show floor  |  | Industry Show floor | Coffee      |
|               |  |  |                     | Posters     |
| 19:00 - 21:20 | Conference Dinner - Hotel Du Vin   |  |                     |             |
| 24/04/2024    |  |  |                     |             |
| 9:00 - 09:25  | Industry - Simon Andrews - From lab to market: excellent science, usefully applied   |  | Industry Show floor |             |
| 09:25 - 09:30 |  |  | Industry Show floor |             |
| 09:30 - 09:55 | Industry - Simon Armstrong - Quantum technologies ecosystem intro (funding, startups, who does what)   |  | Industry Show floor |             |
| 09:55 - 10:00 |  |  | Industry Show floor |             |
| 10:00 - 11:00 | Industry Flash Talks   |  | Industry Show floor |             |
| 11:00 - 11:55 |  |  | Industry Show floor | Coffee      |
| 11:55 - 12:55 | Panel: New and Upcoming Technologies for Optics - Simon Andrews, Simon Armstrong, Alison McLeod, Alexander Jantzen   |  | Industry Show floor |             |
| 12:55 - 13:00 |  |  | Industry Show floor |             |
| 13:00 - 13:40 | Dr Caroline Murawski - Organic semiconductor devices for biomedical applications   |  | Industry Show floor |             |
| 13:40 - 16:00 | Job Fair   |  | Industry Show floor | Lunch       |
| 16:00 - 16:30 | Closing remarks  |  | Industry Show floor |             |