ECR Flash Talks Schedule

Session 1 | Thursday 9th April, 16:40 – 17:10

Presentation Title	Presenter	Affiliation
Combinatorial Optimisation using an Excitable Laser Device	**Seán A. O'Donoghue**	1. School of Physics, University College Cork, College Road, Cork, Ireland 2. Tyndall National Institute, Lee Maltings, Dyke Parade, Cork, Ireland
A Q-Switched Laser Neuron	**Odhran Liston**	Tyndall National Institute and University College Cork, Cork, Ireland
Computing with Stuart-Landau Oscillators: Task-Specific Dynamics and Dimensionality	**Sándor Battaglini-Fischer**	IFISC (CSIC-UIB), Palma de Mallorca, Spain
Reservoir Computing with Heterogeneous Magnetic Metamaterials	**Rawana Yagan**	The University of Sheffield
Unwrapping photonic reservoirs: Enhanced expressivity via random Fourier encoding over stretched domains	**Girish Tripathy**	Emergent Photonics Research Centre, Loughborough University
Tuning random network lasers for physical understanding and neuromorphic computing	**Jakub Dranczewski**	Department of Physics, Imperial College London
Neuromorphic Reservoir Computing for Maritime Supply Chain Disruption Modelling: A Live AIS Data Pipeline for the Strait of Hormuz	**Charuka Herath**	Loughborough University London
A Wilson–Cowan Reservoir Computer for Interpretable Spatiotemporal Vision	**Sharmarke Gabayre**	Loughborough University London

Session 2 | Friday 10th April, 13:45 – 14:15

Presentation Title	Presenter	Affiliation
Emergent Communication Through Liquid Neural Networks in Cooperative Multi-Agent Systems	**Sharmarke Gabayre**	Loughborough University London
How do you solve a problem like noise in neuromorphic vision sensor data?	**Haiyu Li**	The University of Sheffield
Learning from disorder: Nonlinear heterogeneity promotes few-shot learning in network lasers	**Tobias Farchy**	Imperial College London
The Minimal Quantum Reservoir: Qubit-Level Insights	**Roland Weiszmüller**	Eötvös Loránd Scientific University
Small-scale photonic Kolmogorov–Arnold networks using standard telecom nonlinear modules	**Luca Nogueira Calçado**	Aston Institute of Photonic Technology
Energy Efficiency Benchmarking for Neuromorphic Computing	**Theodoulos Parpounas**	Centre for Neuromorphic Technologies, School of Electronics and Computer Science, University of Southampton
Neuromorphic Synaptic Sensing with Molecularly Imprinted Memristors for Neurotransmitter Detection	**AFREEN AHTESHAM**	NORTHUMBRIA UNIVERSITY
Terahertz Image Decoupling via Bayesian Langevin Sampling with Score-Based Diffusion Priors	**Akash Dominic Thomas**	Emergent Photonics Research Centre, Loughborough University

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