### **IMPERIAL**



## UKNC2025 Main Programme 10 – 11<sup>th</sup> July

Huxley Building Concourse Level 3 (Main Lecture Theatre 340 & Posters Rooms 341, 342), 180 Queen's Gate, South Kensington Campus, Imperial College London, SW7 2AZ <a href="https://www.neuralcomputation.uk">www.neuralcomputation.uk</a>

#### Thursday 10th July 2025

Thorsady 10 Jory 2025				
Time	Speaker	Titles		
11:30 – 12:30	Registration & Lunch			
12:30 – 12:45	UKNC Organisers	Welcome		
12:45 – 13:00	<b>Dr Jacques Carolan</b> The Advanced Research + Invention Agency (ARIA)	Precision Neurotechnologies for Human Therapeutics		
13:00 – 13:30	<b>Dr Jonathan Cornford</b> University of Leeds	Normative brain-like learning algorithms		
13:30 – 14:00	Dr lan Hawes University of Edinburgh Selected from Abstracts	Context-specific speed integration enables memory generalisation		
14:00 – 14:30	Prof Jennifer Bizley University College London	How does the brain construct auditory space?		
14:30 – 15:00	Coffee			
15:00 – 15:30	<b>Dr Flavia Mancini</b> University of Cambridge	The neural and computational blueprint for surviving pain		
15:30 – 16:00	Dr Andrea Colins Rodriguez Universidad Adolfo Ibañez Selected from Abstracts	Rhythmic and discrete arm movements arise from the same control strategy in Primary Motor Cortex but not in the Supplementary Motor Area		
16:00 – 16:30	<b>Dr Petr Znamenskiy</b> Francis Crick Institute	A depth map of visual space in the primary visual cortex		
16:30 – 18:30	Posters 1 & Networking Reception Sponsored by The Francis Crick Institute (Partnership Networking Fund)			

### Friday 11<sup>th</sup> July

Time	Speaker	Titles
9:30 – 10:00	Prof Simon Schultz Imperial College London	Neural manifold inference by maximising information
10:00 – 10:30	Jack Cook University of Oxford Selected from Abstracts	Brain-Like Pathways Form in Models With Heterogeneous Experts

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10:30 – 11:00	Prof Claudia Clopath Imperial College London	Estimating the uncertainty of feedforward and feedback inputs with prediction-error circuits	
11:00 – 11:30	Coffee	Coffee	
11:30 – 13:00	Breakout Session Sponsored by the Advanced Research + Invention Agency (ARIA)		
13:00	<b>Lunch</b> Overlaps with start of poster session		
13:30 – 15:00	Posters 2	Posters 2	
15:00 – 15:30	<b>Prof Petra Vértes</b> University of Cambridge	Reservoir Computing as a Window into Structure-Function Relationships in Neural Systems	
15:30 – 16:00	Sebastian Castedo Laboratoire de Physique de l'ENS Selected from Abstracts	Energy-Efficient Neural Coding Under Food Restriction: Structure, Noise, and Resilience	
16:00 – 16:30	Prof Paul Graham University of Sussex	Spatial computations in shallow, insect- inspired networks	
16:30 – 1 <i>7</i> :00	Coffee		
17:00 – 17:45	Keynote: Prof Rafal Bogacz University of Oxford	Predictive coding: effective learning with local plasticity	
17:45	UKNC Organisers	Closing	