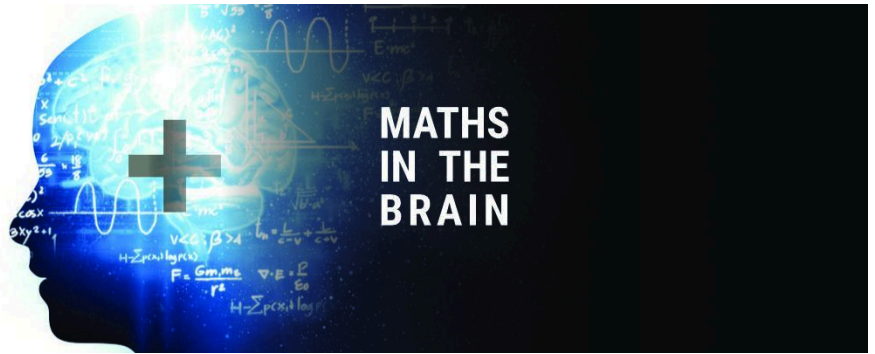


MATHS IN THE BRAIN

Day 1, 7th November, 2024, Kenneth Myer Building, Ian Potter Auditorium, Parkville, VIC 3052

8:30 – 8:55			Coffee & Tea		
8:55 – 9:00			Welcome by Adeel Razi		
Session 1 – Chaired by Alex Fornito					
9:00 – 9:35	Keynote: Criticality, edge-of-chaos and symmetry breaking in physics-aware neuromorphic networks	Zdenka Kuncic			
9:35 – 9:55	Theoretical approaches towards understanding structure-function relationships in neural networks	Andre Peterson			
9:55 – 10:15	Global conscious states and their cortical local dynamics, connectivity and stability correlates.	Levin Kuhlmann			
10:15 – 10:30	Session Q&A				
10:30 – 11:00			Morning Tea Break		
Session 2 – Chaired by Kiley Seymour					
11:00 – 11:20	High-resolution connectome mapping and normative modelling	Andrew Zalesky			
11:20 – 11:40	Advanced methods for EEG representation learning and EEG classification	Mahsa Salehi			
11:40 – 12:00	Tracking near-critical dynamics from noisy neural signals	Ben Fulcher			
12:00 – 12:15	Session Q&A				
12:15 – 12:45	Spotlight Talks (3 talks/8 mins + 6 mins) Mehul Gajwani, Jieru Liao, Hamid Karimi-Rouzbahan	Leo Novelli			
12:45 – 13:15			Lunch		
13:15 – 14:30			Posters + Networking		
Session 3 – Chaired by Marta Garrido					
14:30 – 15:05	Keynote: Tracking circadian rhythms at the population scale	Andrew Phillips			
15:05 – 15:25	Thalamic contributions to the state and contents of consciousness	Mac Shine			
15:25 – 15:45	Are psychiatric diagnoses associated with a robust neuroanatomical phenotype?	Trang Cao			
15:45 – 16:00	Session Q&A				
16:00 – 16:30			Afternoon Tea Break		
Session 4 – Chaired by Brandon Munn					
16:30 – 16:50	Structurally informed generative modelling of effective connectivity: Progress and outlook	Matthew Greaves			
16:50 – 17:10	Critical dynamical behaviour in vitro and in vivo	Chris French			
17:10 – 17:20	Session Q&A				



Day 2, 8th November, 2024, Kenneth Myer Building, Ian Potter Auditorium, Parkville, VIC 3052

8:30 – 8:55			Coffee & Tea
8:55 – 9:00			Welcome by Adeel Razi
Session 1 – Chaired by Luca Cocchi			
9:00 – 9:35	Keynote: Tractogram: A shining star to guide neuroscience discoveries	Fernando Calamante	
9:35 – 9:55	Cerebral glucodynamics in ageing	Sharna Jamadar	
9:55 – 10:15	Geometric eigenmodes: The Swiss army knife of brain mapping	Nikitas Koussis	
10:15 – 10:30	Session Q&A		
10:30 – 11:00			Morning Tea Break
Session 2 – Chaired by Warda Syeda			
11:00 – 11:20	Diffusion MRI of the very preterm newborn	Kerstin Pannek (OHBM-Aus Emerging Leadership Award)	
11:20 – 11:40	Brain imaging at 7T	Leigh Johnston	
11:40 – 12:00	Microstructural white matter alterations in healthy, psychedelic-naïve individuals after subthreshold and full doses of psilocybin	Lena Oestreich	
12:00 – 12:15	Session Q&A		
12:15 – 12:45	Spotlight Talks (3 talks/8 mins + 6 mins) Giulia Baracchini, Sina Mansour L., Isabella Goodwin	James Pang	
12:45 – 13:00	OHBM-Australia - Annual General Meeting	Adeel Razi/Kiley Seymour	
13:00 – 13:30			Lunch
13:30 – 15:00			Posters + Networking
Session 3 – Chaired by Ian Harding			
15:00 – 15:35	Keynote: Neuroimaging research In depressive disorders: Is there potential for clinical translation?	Lianne Schmaal	
15:35 – 15:55	New approaches for driving neuroplasticity with transcranial magnetic stimulation	Nigel Rogasch	
15:55 – 16:05	Session Q&A		
16:05 – 16:30			Afternoon Tea Break
Session 4			
16:30 – 17:15	ARC funding demystified	Katherine Johnson	
17:15 – 17:30			Poster and flashtalk prizes + closing