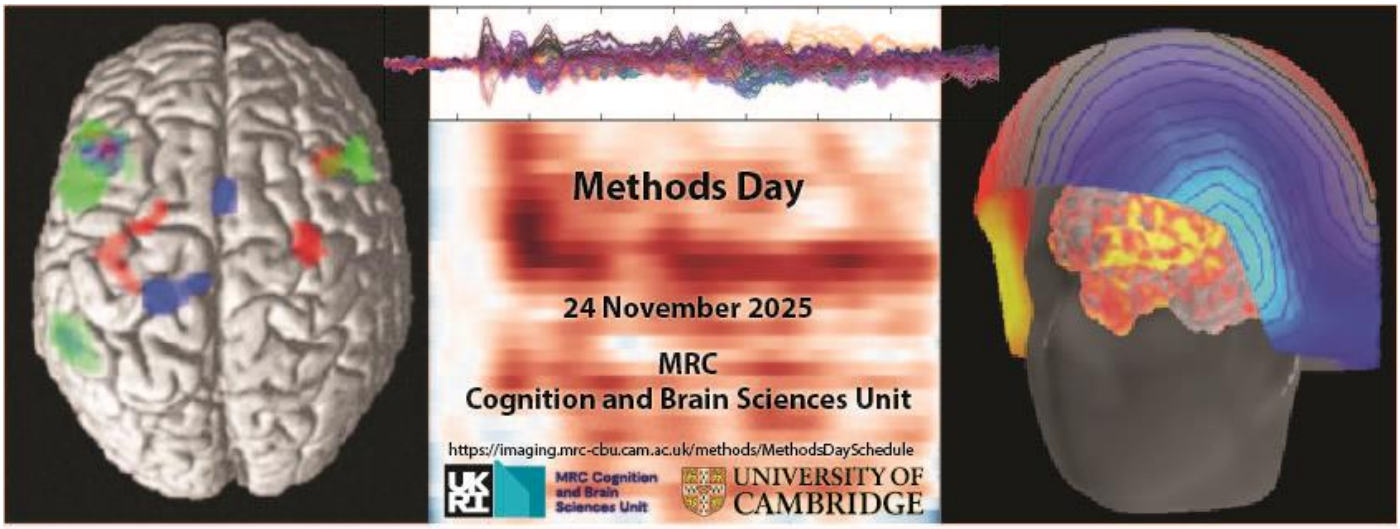
MRC Cognition and Brain Sciences Unit

UNIVERSITY OF CAMBRIDGE



Cambridge Methods In Cognitive Neuroscience Day

24 November 2025

Lecture Theatre, MRC CBU, 15 Chaucer Road, Cambridge CB2 7EF

9.15-10.55	**MRI and fMRI** Chairs: Marta Correia & Dace Apšvalka	
	Graph neural networks for neuroimaging	Clara Pecci Terroba *Department of Psychology*
	Combining functional ultrasound and high-density diffuse optical tomography for whole-brain connectivity imaging in the neonate	Flora Faure *Department of Clinical Neurosciences*
	A Non-Technical Introduction to Large-Scale Models of Brain Dynamics	Kayson Kakhar *MRC Cognition and Brain Sciences Unit*
	PETALUTE: a novel MRI sequence and applications	Stephen Sawiak *Translational Neuroimaging Laboratory*
	Beyond DTI: examining white matter lesion microstructure with advanced diffusion MRI methods	Tatjana Schmidt *Department of Clinical Neurosciences*
11.15-12.55	**Behaviour, Statistics and Modelling** Chair: Paul Bays	
	Assessing neurocognitive hypotheses using likelihood-based models	Jordan Gunn *Department of Psychology*
	Multimodal stimulus presentation and movement	Celia Foster *MRC Cognition and Brain*

	tracking during neuroimaging	*Sciences Unit*
	Model-based analysis of eye-tracking data: an example from learning under uncertainty	Eddie Xiao *Department of Psychology*
	Causal mediation vs traditional mediation	Yuanfei Liu *Department of Psychiatry*
	Using recurrent neural networks to study causal integration	Chris Jungerius *Department of Psychology*
12.55-14.00	**Lunch break**	
14.00-15.00	**Brain Stimulation** Chair: Elizabeth Michael	
	TMS-Neuroimaging for validating new TMS technologies	Elizabeth Michael *MRC Cognition and Brain Sciences Unit*
	Combining TMS with high-density EMG	Maggie Szymanska *MRC Cognition and Brain Sciences Unit*
	Precision mapping and zapping of the brain: Promises and open questions	Maximilian Lueckel *Leibniz Institute for Resilience Research, Mainz*
15.15-16.35	**EEG, MEG, Physiology** Chair: Olaf Hauk	
	Deep brain stimulation to treat addiction	Federica Magnabosco *Department of Psychiatry*
	Time-frequency Co-Information (TFCoI): Unraveling synergistic and redundant cross-frequency interactions using ECoG data	Andrés Canales-Johnson *Department of Psychology*
	Extending SPM to Psychophysiology: Working with Pulse Oximetry Data using PsPM	Mohit Verma *MRC Cognition and Brain Sciences Unit*
	Dynamic functional connectivity during sleep in term and preterm infants	Katharine Lee *University of British Columbia*

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