



Cambridge Methods In Cognitive Neuroscience Day

2 December 2024

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

9.15-11.00	EEG/MEG Chair: Olaf Hauk	
	Attentional Modulation of Prediction Error Information Encoding in Cortical and Subcortical Structures Using Human sEEG	Juho Äijälä <i>Department of Psychology</i>
	Some recent methods developments in MEG analysis by others, stimulated by sharing CamCAN MEG data	Rik Henson <i>MRC CBU</i>
	DCM in Action	Rebecca Williams & Juliette Lanskey <i>MRC CBU</i>
	Aperiodic neural activity and its links to cognition	Runhao Lu <i>MRC CBU</i>
	Tracking loudness and speech features in EMEG data	Chentianyi Yang <i>MRC CBU</i>
11.15-12.00	Brain Stimulation Chair: Alexandra Woolgar	
	Concurrent TMS-fMRI to validate the use of E-field modelling in setting TMS dose	Elizabeth Michael <i>MRC CBU</i>
	Transcranial focused ultrasound stimulation enhances semantic memory by modulating neurochemicals and neural dynamics of the semantic network	JeYoung Jung <i>School of Psychology, University of Nottingham</i>
Lunch break (Light lunch buffet will be provided)		
12.45-13.45	Research Tools Chair: Olaf Hauk	
	Real-time 3D motion tracking using a portable stereo depth camera	Celia Foster <i>MRC CBU</i>
	Web-based methods	Adam Attaheri <i>MRC CBU</i>
	Three AI Tools to Supercharge Your Research	Avi Staiman <i>CEO, Academic Language Experts</i>

14.00-15.00	Behavioural and Statistical Methods Chair: Rik Henson	
	Network Analysis of Behavioural Data in Large Samples and N=1 Studies	Nimrod Hertz <i>MRC CBU</i>
	Beyond P-Values: Embracing Bayes	Rebecca Williams <i>MRC CBU</i>
	Reliability estimation for Bayesian measurement models	Giacomo Bignardi <i>Department of Psychology</i>
15.15-17.00	MRI and fMRI Chairs: Marta Correia & Dace Apšvalka	
	Iterated LASSO and other approaches for whole-brain multivariate decoding of fMRI	Tim Rogers <i>Department of Psychology, University of Wisconsin-Madison</i>
	Progress on 7T Deuterium Metabolic Imaging	Masha Novoselova <i>Wolfson Brain Imaging Centre</i>
	Complimentary MR measures of White Matter and their relation to Ageing and Cognition	Petar Raykov <i>MRC CBU</i>
	Evaluation of scanner differences in T1 structural data using Freesurfer	Tanvi Rao <i>MRC CBU</i>
	Novel approaches to detect abnormalities on MRI in neurodegenerative disorders	Tim Rittman <i>Department of Clinical Neurosciences</i>