



UNIVERSITY OF
CAMBRIDGE

<p align="center">Cambridge Methods Day</p> <p align="center">30 November 2020</p> <p align="center">MRC Cognition and Brain Sciences Unit</p>		
9.10-9.15	<p align="center">Welcome</p>	
9.15-10.45	<p align="center">MRI and fMRI</p> <p align="center">Chair: Johan Carlin</p>	
	Non-invasive Probing of Neurochemistry with Magnetic Resonance Spectroscopy	Carina Graf Wolfson Brain Imaging Centre, University of Cambridge
	Further optimisation of linear estimators of single-trial fMRI responses: Empirical and simulated effects of temporal autocorrelation	Rik Henson MRC Cognition and Brain Sciences Unit, University of Cambridge
	Machine learning to model patient trajectories in Alzheimer's disease	Joseph Giorgio, Department of Psychology, University of Cambridge
	Using deep neural networks as a modelling framework to understand ventral stream computations	Emer Jones MRC Cognition and Brain Sciences Unit, University of Cambridge
	FatNav motion correction at 7T MRI	Krzysztof Klodowski Wolfson Brain Imaging Centre, University of Cambridge
<p align="center">Short break (with beverage of your choice)</p>		
11.15-12.35	<p align="center">EEG/MEG</p> <p align="center">Chair: Olaf Hauk</p>	
	Information theory tools for cognitive neuroscience	Pedro Mediano Consciousness and Cognition Lab, Department of Psychology, University of Cambridge

	Informational fMRI-M/EEG fusion and connectivity	Hamid Karimi-Rouzbahani MRC Cognition and Brain Sciences Unit, University of Cambridge
	General linear modelling and permutation testing of MEG data	Alexander Irvine MRC Cognition and Brain Sciences Unit, University of Cambridge
	Towards studying cognition in the wild with mobile EEG and Augmented Reality	Alexandra Krugliak Department of Psychology, University of Cambridge
Lunch break (not provided...)		
13.00-14.20	Brain Stimulation Chair: Camilla Nord	
	Acute time-locked alpha frequency sub-thalamic stimulation and negative emotional bias	Alekhya Mandali Department of Psychiatry, University of Cambridge
	Combining TMS and EEG	Elizabeth Michael Department of Psychology, University of Cambridge
	Transcranial ultrasound stimulation	Christopher Butler Imperial College London & University of Oxford
Short break		
14.30-15.30	Behavioural and Statistical Methods Chair: Rik Henson	
	Theory-based relations between brain and behaviour through structural equation modelling	Ivan Simpson-Kent MRC Cognition and Brain Sciences Unit, University of Cambridge
	Being better with Bayes – new tools for model selection and parameter estimation	Frank Hezemans MRC Cognition and Brain Sciences Unit, University of Cambridge

	Bayes Factors, Bayesian Linear Mixed Effects Models and Sequential Designs in R/Stan and Registered Reports	Alex Quent MRC Cognition and Brain Sciences Unit, University of Cambridge
Short break		
15.45-16.45	Web-based Experiments Chair: Becky Gilbert	
	Recent developments in web-based experiments: Headphones tests, audio recording, and more!	Becky Gilbert MRC Cognition and Brain Sciences Unit, University of Cambridge
	Mouseview.js -- an online, cursor-based, alternative to eyetracking	Alex Irvine MRC Cognition and Brain Sciences Unit, University of Cambridge
	Is there anything else that you think we should know? The latest advice for online data collection	Elisa Cooper MRC Cognition and Brain Sciences Unit, University of Cambridge
	Beyond jsPsych and JATOS: Extending open source web experiment tools	Dorian Minors MRC Cognition and Brain Sciences Unit, University of Cambridge

For questions and comments, please contact olaf.hauk@mrc-cbu.cam.ac.uk.