METHODS DAY – 16 November 2026

MRC Cognition and Brain Sciences Unit
University of Cambridge

Morning

9:30 – 10.50 | Behaviour, Statistics and Modelling

Chair: Jordan Gunn

09:30–09:50 **Kamila Maria Jozwik** — Generative mixed reality for personalised and controllable exposure to small-animal fears
Kamila Maria Jozwik & Mohaned Abdulmahmood
Department of Computing, Imperial College London; Cambridge Mind and Brain Institute, University of Cambridge

09:50–10:10 **Nicholas Judd** — Design-based causal inference for population neuroscience
Stockholm University; Donders Institute; Cambridge Mind and Brain Institute, University of Cambridge

10:10–10:30 **Maroš Rovný** — Topology-constrained recurrent networks
Cambridge Mind and Brain Institute, University of Cambridge

10:30–10:50 **Kristian Grimeland** — Is Predictive Processing falsifiable?
Department of Psychology, University of Cambridge

10:50–11:00 COFFEE BREAK

11:00 – 12.40 | MRI and Functional Neuroimaging

Chairs: Marta Correia and Dace Apsvalka

11:00–11:20 **Hristo Dimitrov** — Beyond the Markers: Simplifying Motion Tracking for Research
Cambridge Mind and Brain Institute, University of Cambridge

11:20–11:40 **Guangting Mai** — High-density diffuse optical tomography (HD-DOT) and its planned applications for studies in cochlear-implanted and typically hearing individuals
Cambridge Mind and Brain Institute, University of Cambridge

11:40–12:00 **Dong Yin** — Evaluating brain MRI generative models: common versus subject space
Brain Resilience Group, Department of Clinical Neurosciences, University of Cambridge

12:00–12:20 **Kayson Fakhar** — Generative modelling of brain network structure and dynamics
Cambridge Mind and Brain Institute, University of Cambridge

12:20–12:40 **Marta Correia** — Prospective motion correction enhances resting-state fMRI data quality and sample inclusivity in healthy older adults
Cambridge Mind and Brain Institute, University of Cambridge

12:40–13:30 LUNCH BREAK (lunch not provided)

METHODS DAY – Afternoon

13:30 – 14:50 | EEG/MEG

Chair: Olaf Hauk

13:30–13:50 **Tunyang Xie** — Beyond conventional EEG: electronic tattoos for continuous brain monitoring
Tunyang Xie; Yichen Yan; Chengtian Ma; Yuxin Du; Yunfan Zou; Zeyi Liu; Zixuan Guo; Ziyue Hu
NeuraInsight

13:50–14:10 **Runhao Lu** — HeteroRC: Decoding latent information from dynamic neural responses with interpretable heterogeneous reservoir computing
Runhao Lu (McGill University); Sichao Liu (KTH Royal Institute of Technology); John Duncan, Rik Henson, Alex Woolgar (CMBI, University of Cambridge)

14:10–14:30 **François Guerit** — EEG with Cochlear-Implant users: strategies to deal with large artefacts
Charlotte Garcia & François Guerit
Cambridge Mind and Brain Institute, University of Cambridge

14:30–14:50 **Clare Cook** — Quality control in EEG/MEG data
Clare Cook & Olaf Hauk
Cambridge Mind and Brain Institute, University of Cambridge

14:50–15:00 COFFEE BREAK

15:00 – 16:00 | Brain Stimulation

Chair: Elizabeth Michael

15:00–15:20 **Inès de Riedmatten** — Interleaved TMS-fMRI using BOLD and diffusion functional contrasts to study motor inhibition
University of Lausanne; Lausanne University Hospital

15:40–16:00 **Oliver Cattell** — Simulation-based planning for transcranial ultrasound stimulation
University of Nottingham

15:20–15:40 **Georgia Bozianu & Gabriel Mackie** — A comparison of coupling methods for ultrasound: the (in)complete practical guide
Cambridge Mind and Brain Institute, University of Cambridge

16:00 END