

Wednesday 30th October - MEG-UKI Day 1

| Time | Session/Activity | Venue |
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| 8:30 - 9:30 | Registration and Arrival Refreshments | Great Hall |
| 9:30 - 9:45 | Welcome Talk Chair: Andrew Quinn | Bramall Concert Hall |
| 9:45 - 10:45 | Main Session 1 – Cognitive Chair: Yali Pan 9:45 - 10:00 - Oliver Vikbladh , University College London - Consolidation of Sequential Planning 10:00 - 10:15 - Ashley Goneso , Aston University - Relating attention deficits to the neural basis of attention during working memory tasks. 10:15 - 10:30 - Lijuan Wang , University of Birmingham - Fast hierarchical processing of orthographic and semantic parafoveal information during natural reading 10:30 - 10:45 - Min Wu , University of Oxford - Neural dynamics during unimanual and bimanual motor learning | Bramall Concert Hall |
| 10:45 - 11:15 | Refreshment Break | Great Hall |
| 11:15 - 11:30 | Main Session 2 - Hardware Chair: Tom Marshall 11:15 - 11:30 - Denis Schwartz , Université de Lyon - Helium Optically Pumped Magnetometers: Lightweight and versatile sensors for MEG (Talk sponsored by MAG4Health & BrainBox) 11:30 - 11:45 - Harry Cook , University of Birmingham - An optically pumped magnetic gradiometer - neuroscience | Bramall Concert Hall |
| 11:45 - 12:15 | Poster Talks 1 Chair: Tara Ghafar Dr Ryan Hill , Nottingham - Calibration technologies for wearable magnetoencephalography Dr George O'Neill , UCL - Volume conductor models for magnetospinography Dr Alicia Rybicki , CHBH - The neural correlates of selective visual attention in natural scenes Dr Lauren Gascoyne , Nottingham - A National Facility for OPM-MEG Ms Vaishali Balaji , Dusseldorf - Spontaneous Fluctuations in Alpha Peak Frequency Along the Posterior-to-Anterior Cortical Plane Miss Charlie Reynolds , CHBH - Seeing Speech in a New Light: Augmenting Speech Performance using Rapid Invisible Frequency Tagging (RIFT) and MEG Miss Zimo Huang , UCL - Human hippocampal theta oscillations code distance to goal during spatial navigation | Bramall Concert Hall |

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| | <p>Dr Catherine Preston, York - Measuring signals in utero using OPM MEG</p> <p>Dr Matias Ison, Nottingham - Investigating Neural and Cognitive Mechanisms of Free Viewing Tasks Using Concurrent MEG/OPM-MEG and Eye Tracking</p> <p>Dr Coen Zandvoort, Oxford - Breathing modulates cortical activity in newborns</p> | |
| 12:15 - 14:00 | Lunch and Poster Session | Great Hall |
| 14:00 - 14:45 | <p>Main Session 3 - Clinical Chair: Ana Pesquita</p> <p>14:00 - 15:15 - Michael Trubshaw, University of Oxford - Cortical neurophysiology distinct from healthy ageing in neurodegenerative disorders</p> <p>14:15 - 14:30 - Rebecca Williams, University of Cambridge - Living in a World of "Close Enough": Apathy and the Bayesian Brain</p> <p>14:30 - 14:45 - Sukhvir Wright, Aston University - "Network -opathy" in autoimmune encephalitis - bench to bedside insights</p> | Bramall Concert Hall |
| 14:45 - 15:45 | <p>Keynote Session - Maria Wimber, University of Glasgow - How the reconstruction of simple event memories dynamically unfolds in human brain and behaviour</p> <p>Chair: Ben Griffiths</p> | Bramall Concert Hall |
| 15:45 - 16:15 | Refreshment Break | Great Hall |
| 16:15 - 17:15 | <p>Main Session 4 - Cognitive Chair: Ole Jensen</p> <p>16:15 - 16:30 - Yulia Bezsudnova, UCL/University of Birmingham - Temporal and spatial features of common semantic categories in words and picture</p> <p>16:30 - 16:45 - Eelke Spaak, Donders Institute - Rapid Invisible Frequency Tagging (RIFT): Perceptual Foundation, Phase Coding, and Prospects for Naturalistic Neuroscience</p> <p>16:45 - 17:00 - Danying Wang, University of Glasgow - Single trial theta phase synchronisation predicts human episodic memory formation</p> <p>17:00 - 17:15 - Eleonora Marcantoni, University of Glasgow - Enhancing memory in humans via MEG-closed-loop Rhythmic Sensory Stimulation (RSS) tuned to the frequency of hippocampal theta oscillations</p> | Bramall Concert Hall |
| 17:15 - 18:00 | Business Meeting | Bramall Concert Hall |
| 18:30 - Late | Conference Dinner | Fry Suite, Edgbaston Park Hote |

Thursday 31st October - MEG-UKI Day 2

| Time | Session/Activity | Venue |
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| 8:45 - 9:15 | Registration and Arrival Refreshments | Great Hall |
| 9:15 - 10:15 | <p>Main Session 5 – Cognitive Chair: Barbara Pomiechowska</p> <p>9:15 - 9:30 - Oivi Parker Jones, University of Oxford- Decoding speech at scale 9:30 - 9:45 - Krish Singh, Cardiff University - Welcome to WAND: Description and preliminary results from our new public 171-participant dataset: MEG, 3T, 7T, Connectome and questionnaires 9:45 - 10:00 - Lukas Rier, University of Nottingham - The neurodevelopmental trajectory of beta and gamma oscillations 10:00 - 10:15 - Dan Bush, University College London - Fronto-temporal network dynamics during human fear conditioning</p> | Bramall Concert Hall |
| 10:15 - 10:45 | Refreshment Break | Great Hall |
| 10:45 - 11:45 | <p>Main Session 6 – Analysis Chair: Oscar Ferrante</p> <p>10:45 - 11:00 - Enrico Amico, University of Birmingham - Brain fingerprinting in MEG: Evaluation, pitfalls, and interpretations 11:00 - 11:15 - Jose Sanchez Bornot, Ulster University - Brain source and functional connectivity with MEG/EEG analysis: improving Alzheimer's disease early detection using the BioFIND dataset 11:15 - 11:30 - Rukuang Huang, University of Oxford - Modelling variability in functional brain networks 11:30 - 11:45 - Luke Tait, Cardiff University - Optimal signal-to-noise projection of neural responses in health and disease</p> | Bramall Concert Hall |
| 11:45 - 12:30 | <p>Poster Talks 2 Chair: Ben Griffiths</p> <p>Dr. Mats van Es, Oxford - Efficient and reproducible batch processing of M/EEG data using osl in Python</p> <p>Dr Camille Fakche, CHBH - Neuronal evidence for category parafoveal previewing during the 200 ms intersaccadic interval</p> <p>Dr Marlou Nadine Perquin, Cambridge - Magnetoencephalography versus blood-based biomarkers of Alzheimer's Disease</p> <p>Dr Christine Embury, UCL - Mapping eloquent cortex using OPM-MEG in children with epilepsy</p> <p>Dr Pin-Chun Chen, Oxford - Simultaneous EEG-MEG Sleep Recording and Source Localization Reveal Precise Spatiotemporal Distribution of Spindle Activity During Sleep</p> | Bramall Concert Hall |

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| | <p>Dr Oscar Ferrante, CHBH - Predictive suppression relies on late attentional mechanisms</p> <p>Dr Jiaqi Li, CHBH - Probing Spatiotemporal Neural Dynamics of Working Memory Reactivation CHBH</p> <p>Ms Lucy Madeleine Werner, Dusseldorf - The impact of subthalamic nucleus deep brain stimulation in the beta range on cortical beta oscillations and motor performance</p> <p>Ms. Fahimeh Akbarian, VUB (Belguim) - Modulation of 1/f spectral slope dynamics during an auditory oddball task</p> <p>Dr Ana Luisa Pesquita, University of Birmingham - Using OPM-MEG to Study the Infant Brain: Auditory Oddball Responses to Speech and Pure Tones in 2-Month-Olds</p> | |
| 12:30 - 14:00 | Lunch and Poster Session | Great Hall |
| 14:00 - 14:45 | <p>Main Session 7 - Clinical Chair: Alicia Rybicki</p> <p>14:00 - 14:15 - Elena Stylianopoulou, Cardiff University - MEG-derived measures of oscillatory network changes induced by Midazolam and Remifentanyl</p> <p>14:15 - 14:30 - Ben Sanders, University of Nottingham - Measurement of neural oscillations in MS patients in seated and standing conditions</p> <p>14:30 - 14:45 - Girijesh Prasad, Ulster University - Non-invasive BCI for Neuro-rehabilitation</p> | Bramall Concert Hall |
| 14:45 - 15:45 | <p>Keynote Session 2 - Rik Henson, MRC CBU, - Cambridge The value of sharing MEG data from the CamCAN cohort of healthy adult ageing</p> <p>Chair: Tara Ghafari</p> | Bramall Concert Hall |
| 15:45 - 16:15 | Refreshment Break | Great Hall |
| 16:15 - 17:30 | <p>Main Session 8 – Cognitive Chair: Alice Waitt</p> <p>16:15 - 16:30 - Kirandeep Kaur, Aston University - Interactive Brain Project: A story of the marriage between MEG and fMRI, and combining both for accurate mapping of brain activity</p> <p>16:30 - 16:45 - Holly Schofield, University of Nottingham - Building a 384-channel OPM-MEG system</p> <p>16:45 - 17:00 - Nic Alexander, University College London - Using OPM-MEG to Investigate How Autobiographical Memories Are Formed in a Naturalistic Setting</p> <p>17:00 - 17:15 - Runhao Lu, University of Cambridge - Aperiodic and oscillatory systems underpinning human domain-general cognition</p> | Bramall Concert Hall |
| 17:15 - 17:30 | Conference Close and Prizes | Bramall Concert Hall |