Symposium 34: MRI at 7 Tesla: new capabilities and insights

Theme: Sensory and motor systems

Sponsored by the University of Oxford

Thursday 13thth April, 9:00 – 10:40

The advent of 7 tesla MR technology provides unprecedented capabilities for non-invasive imaging of human brain. This technical ability encompasses a range of functional and structural domains, as well as new opportunities for quantifying neurochemicals using spectroscopic techniques. In contrast to studies demonstrating technological proof of principle at 7T, this symposium encompasses work highlighting how we as neuroscientists can capitalise on the technical capabilities of ultra-high field MRI to ask questions previously unfeasible in the field of human neuroscience. Speakers represent four of the 7T sites across the UK, involved in work across a diverse range of brain systems.

Chair: Dr James Kolasinski (Cardiff University)

Co-chair: Dr Ivan Alvarez (University of Oxford)

Speaker 1: Dr James Kolasinski (Cardiff University)

'Somatosensory plasticity at 7T: fMRI, spectroscopy and behaviour'

Speaker 2: Professor Zoe Kourtzi (University of Cambridge)

'From sensory experience to complex decision: insights at 7T'

Speaker 3: Dr Ivan Alvarez (University of Oxford)

'High-resolution MRI of the human visual system - challenges and opportunities at ultra-high field'

Speaker 4: Professor Penny Gowland (University of Nottingham)

'Applications of CEST and MT imaging at 7T'