

Number	Presenter	Abstract title	Abstract keywords
1	Matthew D. Greaves	Spectral imprint of structural embedding in effective connectivity	Effective connectivity; Dynamic causal modelling; Structural connectivity; Cross-species comparison
2	Yuanzhe Liu	Assessing the significance of brain map associations through effective sample size estimation	Spatial autocorrelation; Brain map association; Pearson correlation; False positive rates; Specificity and sensitivity
3	Philip Pruckner	Longitudinal Analysis of the Structural Connectome: Robust Estimation of Fibre Bundle Capacity Differences	Longitudinal; Connectome; Diffusion MRI; SIFT2; Tractography
4	Bryan Paton	Echo Planar Time-resolved Imaging for CSF-GM coupling	fMRI; EPI; CSF-GM coupling; Multi-echo
5	Guowei Zhang	fMRI-Guided Diffusion Models for Visual Brain Decoding	Brain Decoding; fMRI; Conditional diffusion
6	Yihang Jiao	Resistor Capacitor network circuit model for predicting network propagation of direct electrical stimulation	Brain stimulation; SEEG; RC circuit; Network dynamics; Structural connectivity
7	Richa Phogat	A unified model of cortico-hippocampal interactions through neural field theory	Computational neuroscience; Neural Field Theory; iEEG; Brain geometry
8	Marcus Camilleri	Elucidating RNA isoform expression in the 2-day old human prefrontal cortex at single-cell resolution	Genetics; Neurodevelopment; Alternative splicing; RNA biology
9	Carmen Zheng	Lesions (don't) speak volumes: Language fMRI in the Malformed Cortex	Epilepsy; Cognition; fMRI; Brain development; Language
10	Stuart Oldham	Only a matter of time: Developmental heterochronicity captures properties of the human connectome	Development; Connectome; Gradients; Modelling; Connectivity
11	Alicia Alally	Validity of Resting State fMRI as an Alternative to Language fMRI for Paediatric Language Mapping	Resting-state fMRI; Epilepsy; Task-based fMRI; Language Mapping
12	Dhatsayini Rattambige	Investigating the role of structural brain development in shaping early life adversity effects on alcohol expectancy formation in alcohol-naïve adolescents	Adolescent brain development; Early life adversity; Alcohol expectancies; Adverse childhood experiences
13	Lukas Roell	Hippocampal Functional Connectivity as a Brain Marker of Early Negative Symptom Development and Functional Outcome in People at Psychosis Risk	Schizophrenia; Hippocampus; Longitudinal; Symptom development; Resting-state fMRI
14	Warda Syeda	Towards Individualized Care: Affinity Scores Across the Psychosis Continuum	Psychosis continuum; Affinity Scores; Neuroimaging biomarkers; Cognitive dysfunction; Brain volume
15	Wonyoung Kim	Fronto-amygdala and Fronto-hippocampus Functional Connectivity Specialisation in Normal Development and Adversity	Neurodevelopment; Functional connectivity; Adversity; Frontolimbic circuitry
16	Isabella Goodwin	Disentangling white matter alterations across early psychosis and cannabis use disorder: A Pixel-Based Analysis approach	Early psychosis; Pixel-based analysis; White matter microstructure
17	Muskan Khetan	Role of oestradiol and progesterone variability across a month in brain structure and mental health in adolescent females	Female hormones; Brain structure; Adolescence; Mental health symptoms
18	Gabriella Chan	Genetic and Network-Based Constraints on Gray Matter Volume Changes in Psychosis	Schizophrenia; Psychosis; Network spreading model; Grey matter volume; Gene expression
19	Judy Li	Investigating the fractional occupancy of brain states during an emotionally salient video in psychosis using hidden Markov modelling – preregistration	Psychosis; HMM; Negative symptoms; Video-watching
20	Kaela Afflick	Constricted Affect, Distress, and Interoception	Psychosis; Distress; Interoception; Constricted affect; Brain-body connection
21	Amir Hossein Dakhili	Probing the Craving Neurocircuitry in Cannabis Use Disorder Using Real-Time fMRI Neurofeedback	fMRI; Cannabis; Neurofeedback; Addiction
22	Amir Hossein Dakhili	A closed-loop fMRI-neurofeedback system for probing the addiction neurocircuitry during craving, using ultrahigh field MRI	fMRI; Neurofeedback; ACC; Addiction
23	Jessica Ramamurthy	Amygdala volume and distress symptomatology in cannabis use disorder	Cannabis use disorder; Amygdala; Distress; Magnetic resonance imaging
24	Carina Forster	EEG derived dynamic brain states during TMS therapy for depression	TMS; Major depressive disorder; EEG; Dynamic brain states; Longitudinal
25	Sera Manuele	The Effectiveness of Transcranial Magnetic Stimulation in Suicidality: An Updated Systematic Review	Suicidal thoughts and behaviors; TMS; rTMS; iTBS; Systematic review
26	Marilene DeMayo	Locus coeruleus signal intensity in fibromyalgia relative to healthy controls	Neuromelanin; Locus coeruleus; Chronic pain; Fibromyalgia
27	Alexia Samiotis	Characterising the Relationship Between Brain Morphology and Psychopathology in Traumatic Brain Injury Using Normative Modelling	Normative Modelling; Psychopathology; Dimensional; Traumatic Brain Injury; Transdiagnostic
28	Suyi Ooi	Structural brain imaging biomarkers for predicting seizure recurrence after first unprovoked seizure	First unprovoked seizure; Seizure recurrence; Machine learning; Structural MRI; Epilepsy prediction
29	Oun Al-Jedani	Comparison of Automated vs. Manual Glioblastoma Segmentation Using Multiparametric MRI	Glioblastoma; MRI; Segmentation
30	Will Woods	Magnetoencephalic investigation of neural correlates of capsaicin-induced urge to cough	Cough; Magnetoencephalography;
31	Kavindu H Bandara	Investigating the Spatiotemporal Profile of Consciousness using Dynamic Causal Modelling	Consciousness; DCM; MEG; Face Perception
32	Leah Jordan Hudson	Bidirectional modulatory influences of aversive and appetitive stimuli on habenula function and effective connectivity	Task-fMRI; DCM; Habenula; Punishment; Reward
33	Zhuopin Sun	Genetic architecture of MRI-derived cervical spinal cord morphology reveals sensory-motor axis and systemic disease biomarkers	Genetics of the nervous system; Genome-wide association studies; Spinal cord; Image processing
34	Saurabh Sonkusare	Brain-heart coupling shapes large scale brain dynamics	Intracranial EEG; Arousal; Integration; Segregation; Movies
35	Helena Canals Fiol	If the doors of self were cleansed – effective connectivity of ego dissolution	Psychedelics; DCM; fMRI; Parahippocampus; ED
36	Devon Stoliker	Context-Dependent Brain and Behaviour Dynamics under Psilocybin	Psychedelics; Perception; Machine learning; Neuroscience; Translation
37	Yingliang Dai	Brain network dynamics supporting positively biased updating of self-beliefs	fMRI; Belief updating; Bayesian inference; Dynamic causal modeling
38	Johan van der Meer	Distinct brain mechanisms support trust violations, belief integration, and bias in human-AI teams	Brain structural connectome; Brain dynamics; Neural mass models; Attractor dynamics
39	Yinuo Shu	How do topologically complex connections support brain function?	Task-based fMRI; Cognition; Computational methods; Dynamics; Multiscale
40	Giulia Baracchini	Towards multiscale dynamic theories of cognition in human neuroimaging	Motor imagery; Brain-computer interface; Deep learning; EEGNet; OpenBCI
41	Alaka Acharya	Deep Learning Based Classification of MI-EEG Signal for BCI Application	Neural mass models; Neural communication; Neurostimulation
42	Varun Madan Mohan	Characterising whole-brain responses to single-pulse perturbations of <i>in silico</i> neural masses	EEG; Human-AI; Trust; Predictive coding; Metacognition
43	Rui Zheng	Structure-metabolism coupling in healthy aging: a multimodal brain network analysis	fPET; Ageing; Brain networks; Structural connectome; Metabolic connectivity
44	Anna Behler	Metastable coupling between cerebrospinal fluid flow and global brain activity in older adults	Cerebrospinal fluid; Global BOLD; Ventricle-brain dynamics; Ageing
45	Yifei Sun	Age Sensitive Hippocampal Functional Connectivity: New Insights from 3D CNNs and Saliency Mapping	Normal aging; Functional connectivity; Hippocampus; Age prediction; Interpretable 3D CNN
46	Olive Walker	The Impact of Exercise on Brain Structure, Pain, and Cognition in Individuals with Hip Osteoarthritis	Osteoarthritis; Chronic pain; Exercise; Brain structure; Cognition
47	Cassandra Marotta	Enlarged perivascular spaces as a biomarker of disease in progressive supranuclear palsy	Progressive supranuclear palsy; Perivascular spaces; Glymphatic system; Biomarker
48	Mohsen Ghofrani-Jahromi	Mapping Regional Brain Aging in Huntington's Disease Using Structural MRI and Machine Learning	
49	Katharine Huynh	Effects of computerised cognitive training on functional brain networks in Huntington's disease: a pilot study	Cognitive training; Functional neuroimaging; Huntington's disease; Cognition
50	Tamrin Barta	Depression reduces structurally informed network flexibility in premanifest Huntington's disease	Movement disorders; fMRI; Dynamic causal modelling; Structure-function coupling; Default mode network
51	Felicity Simpson	Poor Diet and Cardiometabolic Risk Jointly Relate to Altered Functional Brain Organisation in Healthy Older Adults	Diet; Cardiometabolic risk; Resting-state fMRI; Network segregation; Multivariate analysis
52	Gong Yuqi	Brain Age and Morphometry-Cognition Reveal Distinct Patterns in Early- vs. Late-Onset Alzheimer's	EOAD; LOAD; Alzheimer's disease; Cognition; Morphology
53	Ella Rowsthorn	Data-driven Latent Construct Composites of Brain Health are Associated with Cognition and Alzheimer's Disease dementia	Composite biomarkers; MRI biomarkers; Plasma biomarkers; Cognition; Alzheimer's disease
54	Johan van der Meer	Genetic risk of Alzheimer's and distinct effective connectivity of precuneus during implicit recall	fMRI; Dementia; Polygenic risk factors; Effective connectivity
55	Taylor Solomon	Data-Driven Subtyping of Sporadic Frontotemporal Dementia Using Genotype-Specific Longitudinal MRI Trajectories	Frontotemporal dementia; Longitudinal MRI; Cortical thickness; Disease trajectories; Disease subtyping