

## INM Retreat 2023 - Poster List

Poster number	Title	Spatial scale	Presenter	Institute
Spotlight.01_(P.01)	In silicio approach to predict membrane proteins oligomers: the case of the human D2 neuroreceptor	Molecular	Alessandro Marchetto	INM-9
Spotlight.02_(P.02)	Unexpected single ligand occupancy and negative cooperativity in the SARS-CoV-2 Main protease	Molecular	Simone Albani	INM-9
P.03	Impact of Dimerization on Dopamine D2 Receptor Druggability: A Well-Tempered Metadynamics Study	Molecular	Simone Mariani	INM-9
Spotlight.09_(P.04)	Depletion of Membrane Cholesterol Modifies the Structure, Dynamics, and Activation of Nav1.7	Molecular	Simone Albani	INM-9
P.05	Sodium Channel Nav1.7: Molecular Insights Into Erythromelalgia Mutation Q875E	Molecular	Alessia Piergentili	INM-9
P.06	How redox-state of the \$\alpha\$-2 disulfide bond in HLA-B*1501 affects the binding groove opening and peptide binding	Molecular	Jose Saul Hernandez Fragoso	INM-9
P.07	Data Driven Approaches to Rational Design of Covalent Drugs	Molecular	Christian Bergeest	INM-9
P.08	Electrodynamic forces driving DNA-protein interactions at large distances	Molecular	Elham Faraji	INM-9
P.09	Preclinical evaluation of 18F-labeled tozadenant analogs as potential PET tracers for cerebral A2A adenosine receptors	Molecular	Franziska Wedekind	INM-2
P.10	Molecular Characterization of Gliomas: A Comprehensive in vitro and in ovo study of brain tumor stem cell line BT142mut/- for the development of non-invasive imaging tools	Molecular	Sandra Krause	INM-4
P.11	Assessing the Performance of Non-Equilibrium Thermodynamic Integration in Flavodoxin Redox Potential Estimation	Molecular	Giuseppe Silvestri	Other
P.12	Low molecular weight inhibitor targeting the RNA-binding protein HuR	Molecular	Verena Weber	INM-9
P.13	Multimap targeted free energy estimation	Molecular	Andrea Rizzi	INM-9
P.14	Sex differences in synaptic density in mice with positron emission tomography	Molecular	Jing Ma	INM-2
Spotlight.10_(P.15)	Modeling and simulating spiking neurons and synaptic plasticity with NESTML	Cellular	Charl Linssen; Pooja Babu	Other
Spotlight.03_(P.16)	A python suite to automate the study of cross-species locomotion	Cellular network	Mahan Hosseini	INM-3
P.17	Hierarchical sequence processing in spiking neuronal networks	Cellular network	Melissa Lober	INM-6
P.18	Visual alpha generators in a full-density spiking thalamocortical model	Cellular network	Renan Shimoura	INM-6
P.19	Emergence of NMDA-Spikes: Unraveling Network Dynamics in Pyramidal Neurons	Cellular network	Joshua Boettcher; Michael Dick	INM-6
P.20	Benchmarking and critical evaluation of biologically-plausible sequence learning models	Cellular network	Abigail Morrison	INM-6
P.21	Spatiotemporal alignment of synchronous spike patterns and beta-LFP waves	Cellular network	Sven Krausse	INM-6
P.22	Mitigating the Impact of Artifacts in Massively Parallel Neural Recordings	Cellular network	Jonas Oberste-Frielinghaus	INM-6
P.23	Spatio-temporal pattern detection based on principal component analysis	Cellular network	Junji Ito	INM-6
P.24	Normalizing flows for nonlinear dimensionality reduction of electrophysiological recordings	Cellular network	Peter Bouss	INM-6
P.25	Non-monotonic effect of speed on visual action duration judgments	Multiple brain areas	Sebastian Lammers	INM-3
P.26	Mapping Information Flow within Human Motor Regions	Multiple brain areas	Nan Liu	INM-3
P.27	Exploiting network topology in brain-scale multi-area model simulations	Multiple brain areas	Melissa Lober	INM-6
P.28	Building phase-amplitude dynamics from electrophysiological signals	Multiple brain areas	Azamat Yellesbay	INM-3
P.29	Interactions between attention and prediction under different perceptual loads	Multiple brain areas	Ulises Orbe Arteaga	INM-3
P.30	Influence Of Brain State, A Priori Feature Selection, And Individualized Parcellation On Connectivity-Based Predictions Of Behavior	Multiple brain areas	Nevena Kraljevic	INM-7
P.31	Generative Modeling of Cortical Receptor Distributions from Cytoarchitectonic Images in the Macaque Brain	Multiple brain areas	Ahmed Nebli	INM-1
P.32	Collation of connectivity between thalamus and cortex in macaque	Multiple brain areas	Didi Hou	INM-6

P.33	Relating cortical LFP wave dynamics to behavior in macaque monkeys performing a visuomotor task	Multiple brain areas	Robin Gutzen	INM-6
P.34	Workflows for maintainable and reproducible data and metadata handling	Multiple brain areas	Alexander Kleinjohann	INM-6
P.35	Gender and lifestyle effects in the cerebral oxygen extraction fraction (OEF) : a 1000BRAINS study	Multiple brain areas	Ana-Maria Oros-Peusquens	INM-4
P.36	Denoising Diffusion Probabilistic Models for Modeling Cell Distributions in the Human Brain	Multiple brain areas	Jan-Oliver Kropp	INM-1
P.37	Improving credibility in data analysis through rigor, reproducibility and validation in the Elephant toolbox	Multiple brain areas	Michael Denker	INM-6
P.38	Describing the analysis of electrophysiology data using the Neuroelectrophysiology Analysis Ontology	Multiple brain areas	Cristiano A. Köhler	INM-6
P.39	Partial sleep deprivation alters the effective connectivity of central executive and salience network with the right intraparietal sulcus.	Multiple brain areas	Felix Hoffstaedter	INM-7
P.40	The Burden of Reliability: How Measurement Error impacts Brain–Behaviour Prediction	Multiple brain areas	Martin Gell	INM-7
P.41	Persistent Bimodality in Preferred Tuning Direction Distribution Across Visuo-Parietal Areas	Multiple brain areas	Simon Essink	INM-6
Spotlight.11_(P.42)	V1 population dynamics and dimensionality change with top-down signals from V4	Multiple brain areas	Aitor Morales-Gregorio	INM-6
P.43	Cytoarchitectonic Mapping of the human dorsomedial Prefrontal Cortex	Multiple brain areas	Rahel Felora Possekell	INM-1
Spotlight.04_(P.44)	Multivariate clinical phenotype - brain structure association in autoimmune limbic encephalitis	Brain	Somayeh Maleki Balajoo	INM-7
P.45	Assessing the cross-cohort generalizability of connectivity-based fluid cognition prediction patterns	Brain	Jianxiao Wu	INM-7
P.46	Different strategies affecting pantomime performance in apraxia: virtual grasping and tracing of object-pictures.	Brain	Michella Barddakan	INM-3
P.47	Mouse model of transcranial Direct Current Stimulation (tDCS) as a therapeutic and preventive approach for mild Traumatic Brain Injury (mTBI)	Brain	Nora Rautenberg	INM-3
P.48	Hidden Size: Investigating Size Representations using Unseen Objects	Brain	Elif Memis	INM-3
P.49	Motor responses are interactively shaped by response and conflict expectations	Brain	Annika Sauter	INM-3
P.50	Updating of false prior beliefs in volatile environments	Brain	Anna Bleiser	INM-3
P.51	Human cortex development is shaped by molecular and cellular brain systems	Brain	Leon Lotter; Herta Flor	INM-7
P.52	A theory of data variability in Neural Network Bayesian inference	Brain	Javed Lindner	INM-6
Spotlight.05_(P.53)	Advancing Multi-Class Brain Disorder Identification through Transformer-Based Models and Explainable AI	Brain	Hanning Guo	INM-4
P.54	Impact of framing scheme optimization and smoking status on BPnd quantification in dynamic [11C]ABP688 PET	Brain	Cláudia Régio Brambilla	INM-4
P.55	Predicting Executive Functioning from Brain Networks: Modality Specificity and Age Effects	Brain	Marisa Heckner	INM-7
Spotlight.06_(P.56)	Can Gen AI Resolve Neuroimaging Data Scarcity?	Brain	Farah Abdellatif	INM-4
Spotlight.12_(P.57)	QRAGE – Simultaneous Multiparametric Quantitative MRI at Ultrahigh Field	Brain	Markus Zimmermann	INM-4
P.58	Characterization of the chronic corticosterone animal model of depression and effects of putative antidepressant isoflurane narcotherapy on behavioral and physiological measures: An <i>in vivo</i> [18F]FDG PET study	Brain	Vanessa Schweda	INM-2
P.59	Coincidence processing for the BrainPET-7T	Brain	Debora Niekaemper	INM-4
P.60	Shared Mechanisms in Flash-Grab, but not Flash-Lag Illusion for Illusory Positional Shifts in Moving and Static Objects	Brain	Gizem Yildiz	INM-3
P.61	Influence of gender identity on voice-gender perception during hormone reassignment therapy	Brain	Sarah Friedrich	INM-10
Spotlight.13_(P.62)	Improved radiosynthesis and preclinical evaluation of [18F]R91150 as PET radioligand for 5-HT2A receptors	Brain	Chris Hoffmann	INM-5
P.63	PhD-Project by Ina Sroka (Work in Progress): Modeling the Acceptance of Technologies Based on Artificial Intelligence in Neuroradiology: A Combined Qualitative and Quantitative Study	Brain	Ina Sroka	INM-7
P.64	A Scheme for Transformation from Photon Counting CT Units to Attenuation Correction Factors in Positron Emission Tomography	Brain	Heba Alrakh	INM-4
P.65	Associations between sleep and cognitive performance using the ENIGMA-Sleep data	Brain	Hanwen Bi	INM-7
P.66	Predictive Modeling of Significance Thresholding in Activation Likelihood Estimation Meta-analysis	Brain	Lennart Frahm	INM-7

P.67	Predictions errors of behavior in young populations: their associations with scan-related and sociodemographic variables	Brain	Jingwei Li	INM-7
Spotlight.07_(P.68)	Predictability differences among measures targeting cognitive performance in older age	Multiple brains	Camilla Krämer	INM-1
Spotlight.15_(P.69)	QUALITY OF LIFE & A STUDY PROTOCOL ON COGNITIVE TRAINING IN PRODROMAL PARKINSON'S DISEASE	Multiple brains	Sinah Roettgen	INM-3
P.70	Examination of optimal parameters for MRI-based atrophy-mapping in mild cognitive impairment	Multiple brains	Nils Richter	INM-3
P.71	Processing of immediate and delayed feedback in patients with cerebellar degeneration	Multiple brains	Adam Michael Berlijn	INM-1
P.72	Simultaneous T2/T2* quantification for oxygen extraction fraction estimation using GE-SE EPIK: A preliminary study in brain tumor patients	Multiple brains	Fabian Kueppers	INM-4
P.73	Structural connectome-based predictive modelling of cognitive deficits in treated glioma patients	Multiple brains	Michel Friedrich	INM-3
P.74	Structural brain health relates to both biomedical and psycho-social factors in the UK Biobank	Multiple brains	Mostafa Mahdipour	INM-7
P.75	Latent Behavioral-Brain Relations: Linking Individual Variability in Multimodal Connectivity, Lifestyles, and Cognition in Older Adults	Multiple brains	Mingxian Zhang	INM-1
Spotlight.08_(P.76)	Neural fingerprinting on MEG time series using MiniRocket	Multiple brains	Nikolas Kampel	INM-4
P.77	Contrastive Learning for Neural Fingerprinting in Neuroimaging Analysis with Limited Data	Multiple brains	Nikolas Kampel	INM-4
P.78	Addressing High Dimensionality in Functional Connectivity Analysis: A Network Stacking Approach for Neuroscientific Predictive Modeling	Multiple brains	Leonard Sasse	INM-7
P.79	Sex classification from evoked activity during naturalistic viewing	Multiple brains	Xuan Li	INM-7
Spotlight.14_(P.80)	Behavioral profiling of hippocampal grey matter in late childhood	Multiple brains	Anna Plachti	INM-7
P.81	Effect of acute hypoxia exposure on the availability of A1 adenosine receptors in the human brain measured with [F-18]CPFPX PET	Multiple brains	Manuel Michno	INM-2
P.82	On Uncertainty-aware Deep Learning for Cytoarchitecture Classification	Multiple brains	Christian Schiffer	INM-1
P.83	FastSurfer versus FreeSurfer: (Dis)Similarity of anatomical metrics in German National Cohort & UK Biobank	Multiple brains	Nora Bittner	INM-1
P.84	Dynamic causal modeling computational pipeline for resting-state fMRI data: the structure and main modules for the DCM and PEB analysis	Multiple brains	Alexander Silchenko	INM-7
P.85	Spurious self-feedback of mean field predictions inflates infection curves	Multiple brains	Claudia Lioba Merger	INM-6/INM-10
P.86	Translational Mental Health: Towards measuring haemodynamic activity and electrophysiology at the bedside using fNIRS/EEG – an exploratory investigation in MDD patients	Multiple brains	Ravichandran Rajkumar	INM-4