

# **INM Retreat 2023**

## October 17-18

#### Monday 16.10.2023

| Ctudent meeting |                             |
|-----------------|-----------------------------|
| Student meeting |                             |
| 14:00           | Building 15.9v – Room 4001b |

#### Tuesday 17.10.2023

| Tutorials / Workshops |              |
|-----------------------|--------------|
| 9:00                  | Session I    |
| 10:45                 | Coffee Break |
| 11:15                 | Session II   |

| 13:00 | Lunch |
|-------|-------|
|-------|-------|

| Opening Session |           |         |
|-----------------|-----------|---------|
| 14:00           | GD of INM | Welcome |

| Scientific Presentations |                        |   |
|--------------------------|------------------------|---|
| 14:15                    | Markus Ruether         | Decision Making, Algorithmic Outsourcing and Deskilling – an Ethical Analysis                           |
| 14:35                    | Linnea Hoheisel        | Computational Modelling of Brain Network Dynamics   |
| 14:55                    | Alessandro Marchetto   | In silico approach to predict membrane proteins oligomers: the case of the human D2 neuroreceptor       |
| 14:58                    | Linh Hoang Gia         | Unexpected single ligand occupancy and negative cooperativity in the SARS-CoV-2 Main protease           |
| 15:01                    | Mahan Hosseini         | A python suite to automate the study of cross-species locomotion  |
| 15:04                    | Somayeh Maleki Balajoo | Multivariate clinical phenotype - brain structure association in autoimmune limbic encephalitis         |
| 15:07                    | Hanning Guo            | Advancing Multi-Class Brain Disorder Identification through Transformer-Based Models and Explainable AI |
| 15:10                    | Farah Abdellatif       | Can Gen AI Resolve Neuroimaging Data Scarcity?  |
| 15:13                    | Camilla Krämer         | Predictability differences among measures targeting cognitive performance in older age                  |
| 15:16                    | Nikolas Kampel         | Neural fingerprinting on MEG time series using MiniRocket   |

| Poster Session I with finger food and drinks |              |
|--|--------------|
| 15:20  | Even numbers |
| 16:20  | Odd numbers  |



#### Wednesday 18.10.2023

| Scientific Introductory Talks |                   |  |
|-------------------------------|-------------------|--|
| 9:00                          | Timo Dickscheid   | Helmholtz Al                             |
| 9:15                          | Alexander Lammers | Bernstein Network Computational          |
|                               |                   | Neuroscience                             |
| 9:30                          | Boris Orth        | EBRAINS National Node Germany            |
| 9:45                          | Swen Humpert      | New working group - Neurotracer          |
| 10:00                         | Michael Denker    | Helmholtz Metadata Collaboration (HMC)   |
| 10:15                         | Robert Speck      | Helmholtz Platform for Research Software |
|                               |                   | Engineering (HiRSE)                      |

## 10:30 Coffee Break

| Scientific Presentations |                        |  |
|--------------------------|------------------------|--|
| 11:00                    | Patricia Pais          | Exploring Depth-Specific Function and Connectivity in    |
|                          |                        | the Human Cerebral Cortex                                |
| 11:20                    | Christiane Jockwitz    | Differential predictability of cognitive profiles from   |
|                          |                        | brain structure in older males and females               |
| 11:40                    | Simone Albani          | Depletion of Membrane Cholesterol Modifies the           |
|                          |                        | Structure, Dynamics, and Activation of Nav1.7            |
| 11:43                    | Charl Linssen          | Modeling and simulating spiking neurons and synaptic     |
|                          |                        | plasticity with NESTML                                   |
| 11:46                    | Aitor Morales-Gregorio | V1 population dynamics and dimensionality change         |
|                          |                        | with top-down signals from V4                            |
| 11:49                    | Markus Zimmermann      | QRAGE – Simultaneous Multiparametric Quantitative        |
|                          |                        | MRI at Ultrahigh Field                                   |
| 11:52                    | Chris Hoffmann         | Improved radiosynthesis and preclinical evaluation of    |
|                          |                        | [18F]R91150 as PET radioligand for 5-HT2A receptors      |
| 11:55                    | Anna Plachti           | Behavioral profiling of hippocampal grey matter in       |
|                          |                        | late childhood   |
| 11:58                    | Sinah Roettgen         | Quality of life & a study protocol on cognitive training |
|                          |                        | in prodromal Parkinson's Disease                         |

### 12:05 *Lunch*

| Poster Session II |              |
|-------------------|--------------|
| 13:00             | Even numbers |
| 14:00             | Odd numbers  |

| Closing Session |                                     |
|-----------------|-------------------------------------|
| 15:00           | Concluding Remarks and Poster Prize |

| PI Meeting |                              |
|------------|------------------------------|
| 15:30      | Foyer of the Central Library |