

Agenda:

- **09:30** - Welcome (Prof. Gordon Cheng, ICS)
- **09:45** - Prof. Simon Jacob: *The Stuff of Thought: Investigating the Mechanisms of Cognition by Linking Neurotechnology and Neuromedicine*
- **10:30** - Prof. Jun Tani: *Cognitive Neurorobotics Study Using Predictive Coding and Active Inference*
- **11:15** - Interactive poster session with MSNE students

1. Computational Neuroscience

- **Jin Lee:** "Self-supervised learning on neural data" // University of Tübingen, Tübingen and Ecole Polytechnique federale de Lausanne (EPFL)
- **Matthijs Pals:** "Neuromorphic computing as a substrate for efficient path tracking and path planning" // Robotics, Artificial intelligence and Embedded Systems, Faculty of Informatics, Technical University of Munich, Munich
- **Ashish Rao:** "Noise Quenching in the Stabilized Supralinear Network" // Max Planck Institute of Brain Research Frankfurt
- **Florian Schoenleitner:** "Extending Tympanometry Based Hearing Diagnostics with Methods of Machine Learning" // Harvard Medical School, Boston, Eaton-Peabody Laboratories, Massachusetts Eye and Ear, Boston, Maschinelles Lernen in der Wissenschaft, Universität Tübingen and Max Planck Institute for Intelligent Systems, Tübingen, Germany
- **Xingying Chen:** "Reinforcement learning model of sensorimotor adaptation" // University of Tübingen, Tübingen and Ecole Polytechnique federale de Lausanne (EPFL)
- **Pablo Ochoa De Eribe Delgado:** "Model describing a possible mechanism of auditory-motor sequence learning (study on human behavioural collected data)" //
- **Aishwarya Patel:** "Neural Circuits for Distinct locomotor behaviours in Drosophila larvae" // Max Planck Institute of Brain Research, Frankfurt

2. Neuroimaging Methods and Data Analysis Techniques

- **Pablo Sarricolea:** "Nanomaterial engineering for the synthesis of positive contrast agents in Magnetic Resonance Imaging" // Instituto de Química Médica, Centro Superior de Investigaciones Científicas, Madrid
- **Federico Puppo:** "Protocol for data acquisition and CNN training for Light Field Microscope setup" // Max Planck Institute for Neurobiology, Technical University of Munich, Munich

- **Margaret Lane:** “CNNs for Segmentation in Functional Ultrasound Imaging “// Max Planck Institute for Neurobiology, Munich
- **Eric Gabriel Ceballos Dominguez:** “Neural markers for the detection of intentional stance “// Social Cognition for Human-Robot-Interaction, Istituto Italiano di Tecnologia, Genoa, Italy
- **Orcun Centintas:** “Single-Image Multi-Scale Style Transfer with Generative Adversarial Networks “//Dynamic Vision and Learning Group, Department of Informatics TUM, Munich, Germany
- **Vladimir Budovkin:** “Implementing a pipeline for efficient access to experimental data” //Department of Neurosurgery, Translational Neurotechnology Laboratory, TUM,Munich

3. Human-centred Engineering, Rehabilitation and Medical Research

- **Rafael Javier Pérez Belizón:** “Simulated triphasic stimulation of Auditory Nerve Fibres “// Bio-inspired Information Processing Lab, Fakultät für Elektrotechnik und Informationstechnik, TUM,Munich
- **Paula Fulton:** “Performance Comparison of Three EMG-controlled Supernumerary Robotic Finger Design Prototypes “// Institute of Cognitive Systems, TUM,Munich
- **Lisa Held:** “A study that investigates alpha synchronizations during attention shifts in working memory “// Instituto Pluridisciplinar, Universidad de Complutense Madrid, Spain
- **Megan Girczyc:** “Redesigning 3D printed microdrive arrays for use in the rodent prefrontal-cortex “// University of California, Irvine; Department of Biomedical Engineering