Master's Thesis Opportunity

VisionCircuitsLab – LMU
Supervisors: A. Sumser & L. Busse

We are seeking a highly motivated Master's student to join a thesis project in systems neuroscience entitled:

Thalamic integration of behavior into visual processing

The VisionCircuitsLab at the LMU Faculty of Biology explores how context, internal state, and behavior shape early visual processing. Within this framework, we offer a Master's thesis focused on measuring and analyzing neural activity in behaving mice starting in early 2026. The project will establish fiber photometry recordings in the lab and develop analysis tools for the resulting datasets, with the goal of uncovering how behavioral and visual signals are integrated in the thalamic nucleus LP.

You will gain hands-on experience in viral expression of calcium indicators, stereotaxic implantation of optic fibers, calcium signal acquisition in awake animals, and computational analysis. The project is embedded in a dynamic, supportive research environment with close supervision and the chance to introduce an exciting new method into the lab's repertoire.

Methods you will learn:
- Mouse handling
- Stereotaxic surgery and implantation procedures
- Fiber photometry recordings of input/output calcium signals
- Neural data processing and analysis

What we expect from you:
- Motivation and a problem-solving mindset to develop new experimental approaches
- Willingness to work with mice
- Interest in data analysis (experience with Python is an advantage)

Please send a short motivation letter, possible starting date and a detailed CV to sumser@bio.lmu.de