

One PhD position in:
Cellular mechanisms underlying the processing of sensory- and navigation-
related information

Group: Dr. T. Fellin

Optical Approaches to Brain Function Laboratory, Istituto Italiano di Tecnologia (IIT)

We invite applications for one PhD position focusing on the application of experimental and analytical approaches to dissect out the neural circuits underlying sensory perception and spatial navigation. The project will focus on the cellular mechanisms that underlie the encoding of sensory-related and navigation-related information in the rodent neocortex and hippocampus. State-of-the-art techniques are available for the execution of this project including benchtop and miniaturized two-photon functional microscopy, two-photon optogenetics, and behavioral analysis. Candidates must hold a graduate degree in biology, physics, bio-engineering or a related discipline and be highly motivated and creative individuals who want to work in a dynamic, multi-disciplinary research environment. Research activities will be carried out in the Optical Approaches to Brain Function Laboratory supervised by Dr. Fellin at the Istituto Italiano di Tecnologia. For reference to recent work please see: Sattin et al. *eLife* 2025; Kagiampaki et al. *Nat. Methods* 2023; Sità et al. *Nat. Comm.* 2022; Curreli et al. *PLOS Biol.* 2022; Vecchia et al. *Cur. Biol.* 2020, Panzeri et al., *Neuron* 2017; Beltramo et al., *Nat. Neurosci.* 2013.

Applications (full CV and statement of research interest) should be sent by email to Dr. Tommaso Fellin (tommaso.fellin@iit.it).

Deadline for application: June 2025