

Ph.D course in Neurobiology

Head of the Ph.D course: Prof. Paul Alexander Heppenstall

Web site: [Neurobiology](#)

Research lines:

- Peripheral Nervous System
- Pain, touch and itch
- Olfactory Systems and Ion Channels
- Synaptic Neurophysiology and Neuronal Networks
- Cell excitability and cortical information processing
- Optogenetic and electrophysiological approaches to Neuronal Networks
- Computational Neuroscience and Modelling
- Bionanotechnology
- Neurotoxicity and calcium signaling
- New Materials and Neurons
- Neurophysiology of Motor control
- Spinal networks patho-physiology and locomotion
- Interfaces to simultaneously stimulate and record signals from the spinal cord
- Respiratory physiology
- Neurophysiology and neuropharmacology of spinal motoneurons
- Olfactory and taste dysfunctions in COVID-19
- Visual systems and feature detection
- Simultaneous acquisition of neural activity and behavior
- Innate behaviors and their underlying circuits
- Functional imaging approaches to neural circuits

Fellowships available: 4

Admission: Academic and scientific qualifications + oral exam

Beginning of the Courses: 7 November, 2022

Evaluation of academic and scientific qualifications: 30 points

Besides the documents mentioned in the general part of the announcement, all applicants must provide a written essay in English, describing their previous academic background and scientific motivations to pursue a SISSA PhD and including a short list of these projects among those listed above).

The essay (about 3 pages long – 800 words) will be used for an initial screening of suitable candidates to be invited to the oral exam.

Access to Oral Exam: minimum mark of 21/30 on academic and scientific qualifications

Evaluation of Oral Exam: 70 points

Total Evaluation: 100 points

Eligibility: 70 points

First Session

Deadline for online submission of applications: 21 March, 2022

Interviews: 19 – 20 April, 2022

Second Session (only if there should still be places available after the first one)

Deadline for online submission of applications: 31 August, 2022

Interviews: 29 - 30 September, 2022

Admission to the written exam and results of all evaluations will be notified by email.