

Advanced theoretical training course on Fundamental Principles in Sensory Processing

Organizers

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Speakers

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Location

MPI for Experimental
Medicine

UNIVERSITÄTSMEDIZIN
GÖTTINGEN **UMG**

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How are sensory stimuli detected, encoded, and processed? The advanced theoretical training course 'Fundamental Principles in Sensory Processing' will review and discuss principles in the decoding of sensory information by nervous systems. The course, which mainly targets PhD students, includes 14 lectures that will be presented by experts in the field. Various sensory modalities will be covered, with topics ranging from the transduction of stimuli by sensory receptor cells to higher-order stimulus processing. Presentations will invite lively interactions with the class, and there will be plenty of room for discussions. We look forward to your application!

Topics:

Transduction of sensory stimuli:

Signal transduction in somatic senses, audition, mechanosensation, chemical senses and vision of vertebrates and invertebrates.

Encoding of sensory information:

Signal propagation and coding principles from primary to secondary neurons of the retina, the inner ear, electroreceptive organs and the olfactory system.

Processing of sensory information by central networks:

Higher-order processing of olfactory, auditory, somatic and visual senses in the brains of vertebrates and invertebrates.

Application:

Please send your application including your CV, an abstract summarizing your current research and a short statement why you would like to attend the course to ggnb@gwdg.de (no registration fee for the course required).

