PhD Position – BCCN Munich

Multimodal Stabilization of the Auditory World

When we move our head while listening to a world-fixed auditory target, the auditory stimulation arriving at the ears changes, yet we correctly perceive the target to be stationary in the world. This illustrates the brain's ability to use non-auditory sensory and motor signals to stabilize the auditory world. The Bernstein Center for Computation Neuroscience (BCCN Munich) seeks a PhD student for a fully-funded project to investigate the mechanisms underlying this auditory stabilization. Human psychophysical experiments will assess perceptual stabilization using two different virtual reality motion simulators, a hexapod motion platform and a rotating chair located in Klinikum Grosshadern and the LMU Biocenter, respectively. Complementary neurophysiological experiments in bats, conducted by a student at the TUM Zoology department, will investigate neural mechanisms of auditory stabilization. The successful applicant will become familiar with all three research institutes and will be trained in a variety of methodological approaches.

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Human VR setup of the BCCN Munich



Hexapod Motion Platform Klinikum Grosshadern

Responsibilities:

- Conducting psychophysical experiments in humans
- Analyzing data
- Preparing results for presentation

Desirable qualifications:

- Neuroscience, biology, psychology, and/or engineering background
- Interpersonal skills
- English language
- Experience with Matlab

To inquire please contact:

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