



Neuroscience Lecture Bonn Center of Neuroscience

Brain-wide networks underlying behavior: Insights from functional ultrasound imaging

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Functional ultrasound imaging (fUS) is an emerging neuroimaging tool capable of measuring brain-wide vascular signals linked to neuronal activity with a high spatial-temporal resolution (100 µm, 10 Hz) in real-time with a small portable system. Importantly, fUS is one of the few methods that enables imaging of activity deep in the brain of behaving animals. In the lab, we combine fUS, circuit manipulations and behavior quantification in mice to shed new light on how distributed brain networks dynamically encode behavior. After demonstrating the potential of this approach for a simple visuomotor behavior, I will show how we use it to study more general aspects of behavior, such as behavioral switching, which is a function essential for survival, likely conserved across species, and altered in psychiatric disorders such as depression.

September 08, 2022, 4:30 p.m.

MPI for Neurobiology of Behavior, Lecture hall



If you would like to meet with the speaker, please contact:

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