

IGSN - COLLOQUIUM

Monday, July 29th 2019 • 15.00 (3 pm)

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Speedy synapses with perfect precision! Formula 1 cars in the auditory brain?

Synaptic transmission is a ubiquitous process. Nevertheless, the amount of transmitter released upon an action potential, the robustness of synaptic responses, the temporal precision, and the resilience to sustained stimulation may vary tremendously between synapse types. The talk will focus on the synaptic performance in the mammalian central auditory system. An emphasis is laid on synapses that are involved in sound localization, which requires information processing in the submillisecond range. The synapses will be compared with other synapse types, e.g. in the hippocampus. It turns out that synapses in the auditory brain appear to be tuned like formula 1 cars. They perform ultrafast, with exquisite temporal precision and high indefatigability. What enables them to do so will also be discussed in the talk.

Host:

KLAUS-PETER HOFFMANN Animal Physiology, Faculty of Biology and Biotechnology, Ruhr University Bochum

Guests are welcome!



