Zentrum Physiologie

Medizinische Hochschule Hannover

Einladung

zum Physiologischen Seminar

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Institute of Cellular Neurosciences I, Medical Faculty
University of Bonn

https://synapse-glia-lab-bonn.de/people/



Control of synaptic and dendritic signalling by astrocytic D-serine and glycine

Astrocytes, a major class of glial cells in the brain, are important regulators of neuronal information processing. This talk explores how astrocytes control the integration of synaptic inputs in neuronal dendrites through the NMDA receptor co-agonists D-serine and glycine. We show that neuronal activity recruits distinct astrocytic signalling pathways that regulate the extracellular availability of these molecules. While D-serine facilitates dendritic spikes and contributes to spatial memory, activity-dependent glycine release involves the reversal of astrocytic transporters and can also engage inhibitory glycine receptors. Together, these mechanisms reveal how astrocytes dynamically regulate neuronal excitability, synaptic plasticity and information processing.

Datum:	**12. November 2026**
Ort:	**Hörsaal N**
Gebäude:	I01-01-1120
Zeit:	**16 Uhr c.t.**

Gäste sind herzlich willkommen!

Ansprechpartner:

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