



EINLADUNG

zum Vortrag im Rahmen des Seminars des SFB/TRR 31

Freitag, 2. Juni 2017, 11.00 Uhr c.t.

im Raum H28 / R 2.31 des Med. Campus Magdeburg und
Raum W30 0-33/34 der Universität Oldenburg (NeSSy) (per Videoübertragung)

"Investigating mechanisms of temporal processing at different levels of the auditory system"

Simone Kurt

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The first part of my talk will focus on different response properties of cortical fields in the mouse auditory cortex in both awake and anesthetized animals.

In the second part I will present projects focusing on auditory processing disorders. Although many forms of hearing impairment and deafness in men result from deficits in the auditory periphery, particularly the cochlea, hearing disorders exist that reside in the central auditory system, which is responsible for transferring, processing and finally perceiving the auditory information. Using different mouse models with normal or mildly increased hearing thresholds we are investigating central processing deficits. Using electrophysiological recordings from mouse auditory midbrain we are examining e.g. the impact of endbulb of Held synapse malfunction for temporal coding as observed in *a2d3*^{-/-} mice with impaired function of presynaptic calcium channels. We are interested in the question if this will lead to impaired temporal coding within the central auditory pathway and finally malfunctional perception. Taken together, our results will demonstrate a model for an auditory processing disorder.