



EINLADUNG

Zu **zwei** Vorträgen im Rahmen des Seminars des SFB/TRR 31

Freitag, 25. April 2014, 14 Uhr c.t.

im Raum H28 / R 2.31 des Med. Campus Magdeburg
und Raum W2 1-143 der Universität Oldenburg
(per Videoübertragung)

“The role of cholinergic modulation in learning and active sensing”

Christian Kluge

Universität Magdeburg

Based on findings in animals that the auditory cortex has key capabilities to undergo plastic changes in response to learning and that the cholinergic system plays a key role in these processes, this project investigates the influence of cholinergic modulation on auditory cortical processing. Making use of the opportunity to directly influence the endogenous cholinergic system in a cohort of patients implanted with deep brain stimulation systems, and complemented by a pharmacological strategy in healthy control participants, we aim to further our understanding of the adaptive active sensing properties of the auditory system and their behavioral consequences

“Neural basis of audiovisual integration”

Toemme Noesselt

Universität Magdeburg

Our project investigates the neural basis and temporal dynamics of cue-selection in audiovisual contexts in humans. In the last two funding periods we investigated the neural processes of temporal AV processing and top-down influences on AV-integration. We now extend our research and focus on the selection of cues, which modulate AV-integration. In particular, we will investigate cue selection and the built-up of expectancies in regular and irregular temporal sequences and in behaviorally relevant looming stimuli. The results of our experiments will significantly broaden our understanding of the interactions of expectancies, behavioral relevance and action planning with audiovisual integration.