



# EINLADUNG

zum Vortrag im Rahmen des Seminars des SFB/TRR 31

**Freitag, 6. Juni 2014, 14 Uhr c.t.**

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

***“Detecting interaural time differences and remodeling  
their representation “***

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Interaural time differences (ITD) represent an important cue in sound localization and auditory scene analysis. To assess this cue the auditory system internally delays binaural inputs to compensate for the outer delay, before neurons in the brainstem detect the coincident arrival of the inputs from the two ears. Different origins of internal delays have been controversially discussed and given rise to conflicting interpretations of the ITD representation ensuing from coincidence detection. Yet, recent findings indicate that ITD representations undergo substantial transformations or remodeling after the detection step. Here I treat the detection step separately from remodeling, and explain why a similar representation of ITD across species may exist in the forebrain despite differences in detection and representation in the midbrain.