



EINLADUNG

zum Vortrag im Rahmen des Seminars des SFB/TRR 31

Freitag, 21. Juni 2013, 14 Uhr c.t.

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

"Interaction between cortical responses and natural sounds in the primate auditory system using MRI-guided electrophysiology"

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The brain is equipped with a system that can incorporate the external world. The statistics relating to natural signals are known to share many similarities to those of our own physiological signals, such as heart rate, neuronal firing rates and brain oscillations. Interaction between the brain and the external environment facilitates the emergence of new capacities and novel behaviours due to optimisation of the brain's systems. I will investigate the interaction between the neuronal responses and regularities observed in external natural auditory signals, particularly self-generated sounds such as vocalisation, speech and music. In this talk, I will use a primate model system to demonstrate and discuss the cortical representation and pathways of prominent features observed in natural sounds, e.g., rhythm, pitch and voice, and how interaction between the cortical system and natural sounds can influence our behaviours.