



EINLADUNG

zum Vortrag im Rahmen eines außerplanmäßigen Seminars des SFB/TRR 31

Donnerstag, 29. Oktober 2015, 14 Uhr c.t.

im Raum W30 0-33/34 der Universität Oldenburg (NeSSy)

"Models and Mechanisms of Multisensory Speech Perception"

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Speech is the most important mode of human communication and speech perception is multisensory, making use of both auditory information from the talker's voice and visual information
from the talker's face. Surprisingly, some individuals make little use of visual speech information,
while others are strongly influenced by it. In this seminar, I will discuss our attempts to construct
Bayesian models, specifically models of causal inference, to understand why this might be. At the
neural level, we have used electrocorticography (ECoG), fMRI and TMS to understand the neural
substrates of multisensory speech perception. These studies have revealed that the human superior
temporal sulcus (STS) is a key node in the brain network for speech perception. ECoG studies of
the neuronal dynamics of integration suggest that low-frequency coupling between visual cortex
and STS may gate the processing of visual speech information. Suggestive evidence for a
relationship between individual differences in eye movements and multisensory speech perception
will be presented.