

Der Sonderforschungsbereich 991 "Die Struktur von Repräsentationen in Sprache, Kognition und Wissenschaft" lädt herzlich ein zum Vortrag von

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Donnerstag, 16.04.2015

12:30 – 14:00 Uhr

22.21. HS 2E

*Cortical dynamics during language understanding:
From multimodal concepts to speech acts*

Current models of language processing advocate that word meaning is partially stored in distributed modality-specific cortical networks. For example, words denoting visual features (e.g., *green, round*) engage ventral visual areas, while words denoting actions (e.g., *grasp, kick*) activate a frontal-parietal action network. However, while much has been done to investigate where information is represented in the brain, the neuronal dynamics underlying how these networks communicate at different levels of the cortical hierarchy are still poorly understood. Exploiting the fine temporal resolution of electrophysiological methods (EEG, MEG), I will demonstrate how oscillatory neuronal activity contributes to the integration of conceptual knowledge within and across modality-specific networks. Furthermore, I will use a modeling approach on functional imaging data to show how modality-specific systems respond in a more realistic speech environment where we generate predictions about the communicative intent of the speaker.