



Sonderforschungsbereich/Transregio 31 "Das aktive Gehör"

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## **EINLADUNG**

zum Vortrag im Rahmen des Seminars des SFB/TRR 31

**Freitag, 4. Februar 2011, 14 Uhr c.t.**

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

***"Single-trial coupling of the gamma-band response  
and the corresponding BOLD signal"***

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Oscillations in the gamma-band frequency range have been described to be more closely connected to hemodynamic changes as assessed with functional magnetic resonance imaging (fMRI) than other aspects of neuronal activity. In addition, gamma-band oscillations have attracted much interest during the last few years since they are thought to play a crucial role in many aspects of brain function related to perception and cognition. Schizophrenia is associated with disturbances in all these functions and there are now many studies describing altered neural oscillations in the gamma band range in patients with schizophrenia. Disturbed gamma oscillations in schizophrenia are related to basic pathophysiological disturbances of the disease including dybalance between fast spiking GABAergic interneurons and glutamatergic pyramidal cells. This talk will cover recent results concerning the integration of EEG and fMRI and possible implications for the understanding of neuropsychiatric disorders.