



Sonderforschungsbereich/Transregio 31 "Das aktive Gehör"

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# EINLADUNG

zum Vortrag im Rahmen des Seminars des SFB/TRR 31

**Freitag, 5. November 2010, 14 Uhr c.t.**

Universität Oldenburg im Raum W2 1-143  
und

Universität Magdeburg, Medizin Campus, H28 / R 2.31,  
Video Konferenz Raum (per Videoübertragung)

"Using stimulus frequency otoacoustic emissions to uncover basic properties of the human medial olivocochlear system"

**Bradford Backus**

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Ear Institute

The medial olivocochlear reflex (MOCR) is a brainstem-based neural feedback circuit by which mammals adaptively adjust the gain of their ears in response to changing environmental conditions. Activating the reflex with sound reduces cochlear gain, but the mechanisms by which the reflex produces its cochlear effects, the role(s) the reflex plays in hearing and many basic reflex properties are not well-understood. Here we quantify three basic properties of the reflex in humans using stimulus-frequency-otoacoustic-emissions (SFOAEs):

- (1) The relative strengths of ipsilateral and contralateral reflexes
- (2) The reflex time-course
- (3) The distribution of reflex strengths across a normal-hearing population