



EINLADUNG

zum Vortrag im Rahmen des Seminars des SFB/TRR 31

Freitag, 28. November 2014, 14 Uhr c.t.

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

***"Internally Coupled Ears (ICE): the cool part of sound
localization"***

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Internally coupled ears, for short ICE, provide a powerful means of enhancing (in a direction-dependent fashion) the input difference between left and right ear due to an external sound source. ICE occurs in many animal groups, such as frogs, lizards, birds, and crocodilia. It will be shown that two factors play a key role. First, the physical geometry of the air-filled cavity connecting the two ear drums. Second, the fundamental frequency and hence the elastic properties of the tympani connecting the outside auditory world with the interior, air-filled, connection. Treated together, these factors allow physical and hence mechanistic insight in how ICE works.