

# Geowissenschaftliches Kolloquium

## *Subduction-driven recycling of continental margin lithosphere*

Donnerstag, 24. November 2016 - 16.15 Uhr

**Alan Levander**  
(Rice University - USA)

While subduction recycling of oceanic lithosphere is one of the central themes of plate tectonics, recycling continental lithosphere appears far more complicated and is less well understood. Delamination and convective downwelling are two widely recognized processes invoked to explain the removal of lithospheric mantle under or adjacent to orogenic belts. I describe another process that can lead to the loss of continental lithosphere adjacent to a subduction zone: Subducting oceanic plates can entrain and recycle lithospheric mantle from an adjacent continent and disrupt the continental lithosphere far inland from the subduction zone.



Layout: FUB Geopal Medienbüro, Jan Evers 2016.11.21

**Prof. Levander's** research includes developing seismic modeling and imaging methods. Levander received a PhD from Stanford University, and worked in the petroleum industry before joining the Rice faculty. He is a fellow of the Geological Society of America and American Geophysical Union, and received the GSA Woollard Award, and a Humboldt Foundation Research Prize.

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