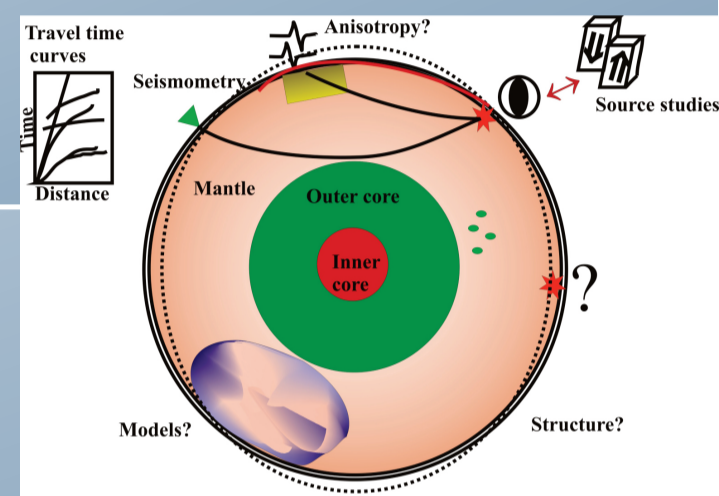


Mentoring Lecture Series

Empowering Women to Develop Academic Careers

May 15, 2012, 16:00, UZAI 2B201
Prof. Christine Thomas
Universität Münster, DE



The lowermost mantle and the post-perovskite phase transition

Using recordings of seismic events that sample the deep mantle, we can test different hypotheses of mantle processes and the state of minerals, such as subducted lithosphere, anisotropy, and the post-perovskite phase transition. Earthquakes which sample different regions of the Earth can be used to verify the causes of the observed D'' reflections, i.e., reflections off features in the lowest 200-300km of the Earth's mantle. In some fast-velocity regions, more than one discontinuity is observed, also polarities of reflections in tomographically fast regions differ, probably due to anisotropy in the lowermost mantle.

In the presentation several possibilities of causes for the reflection will be discussed, implying dynamic models in a convective system.

The science lecture (ca. 1 hour) is followed by a Question & Answer period on issues specific to career development of women in academia (e.g., options, barriers, how to overcome them, good practices and strategies).

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