グローバルCOE地球惑星科学 フロンティアセミナー

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場所 AOB 別館 第一会議室

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Unraveling the physical structure of subduction zones:thermal-petrological constraints on seismicity, anisotropy, attenuation, and more!

講義内容:

We will make a team presentation on our MARGINS/GeoPRISMS sponsored work in collaboration with Drs. Nakajima and Kita. A primary focus has been to develop better thermal and petrological predictions for the state of the subducting slab and mantle wedge and to use these in direct comparison with seismological observations. A significant new finding is the demonstration that dehydration reactions with a negative Clapeyron slope may determine the location of intermediate-depth seismicity. We will discuss the observations and the models that led to this conclusion and add a short discussion of ongoing and future work on the use of anisotropy and attenuation to further constrain the physical nature of subduction zones.