

Institut für Geophysik

Geophysikalisches Kolloquium
Wintersemester 2021/22

Montag, 17. Januar 2022

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Meeresforschung**

Lessons from the Past

Predicting the future spread of possible climates, the risk of climate extremes and the risk of rapid transitions is of high socioeconomic relevance. The past provides evidence of abrupt climate change and the frequency of extremes. This allows to separate anthropogenic signals from natural climate variability. Earth system models applied both to past and future scenarios will enhance our ability to detect regime shifts which are necessary to potentially predict climate extremes and transitions. I consider the response of the system to tectonic, orbital forcing and then focus on shorter time scales. I will also discuss recent developments of climate models with superior resolution in typical retrieval regions of paleoclimate records, such as continental margins and coasts. Our multiscale approach is applied to radiocarbon simulations enabling a dynamical interpretation of marine sediment cores. Finally, I will explore a close link between climate variability, the statistics of weather patterns, and extreme events.

Das Kolloquium findet um **16Uhr.t.** als Zoom-Videokonferenz statt. Der Link dazu wird auf der Homepage und per eMail rechtzeitig mitgeteilt.
Alle an dem Thema Interessierten sind hierzu herzlich eingeladen.

Die Dozenten des Instituts für
Geophysik