

GEOGRAPHISCHES KOLLOQUIUM

Wintersemester 2022/2023

Einladung zum Vortrag am

Dienstag, 13.12.2022, 16:15 Uhr, Kl. Hörsaal MN 09

Frau Dr. Anne Voigtländer

Geoforschungszentrum Potsdam, Sektion Geomorphologie

„How to build a mountain“

Earth's surface is made of rocks, sediments, biota, and water. The topography is increased by tectonics, and decreased by erosion. The interplay of uplift and erosion creates landforms. The resulting shape defines geomorphic processes, like drainage patterns, rates of mass movements, sources and sinks of materials, and affects climate and biota. But how do these landforms, here a mountain, form in the first place? How is a steep wall built by erosion? What defines the rate of change of a landform? And how do certain shapes persist? In this talk I want to explore first which processes sculpt mountains. Then, once a mountain is shaped, I will highlight how steep slopes and canyons can persist. Knowing, how a mountain is built informs about potential location of hazardous instabilities, quantification of material flux, and sensitivity to climatic changes, in the long-term.

Im Namen des Vorstandes des Geographischen Institutes lade ich Sie herzlich zu den
Vorträgen des Geographischen Kolloquiums ein.

gez. Prof. Dr. Daniela Sauer