

EINLADUNG ZUM VORTRAG

am **MONTAG, 18. NOVEMBER 2019, 16:45 UHR**

NEUES INSTITUTSGEBÄUDE

Universität Wien • Universitätsstr. 7 • 1010 Wien

HÖRSAAL I, ERDGESCHOSS

Prof. Dr. **Michael
KRAUTBLATTER**

Ingenieur fakultät Bau Geo Umwelt,
TU München, D



WHY IS THERE NO UNIVERSAL LAW FOR ROCK WALL RETREAT?

Comparing studies of rock slope erosion and soil slope erosion, no governing equation similar to the universal soil loss equation for rock slopes are available. Rock masses in contact with the atmosphere are affected by a suite of physical, chemical and biological processes which degrade intact rock, creating new fractures and extending existing flaws. Complex feedbacks must be explored between changing slope boundary conditions, stress redistribution and fracturing, and weathering by external mechanisms. To limit the range of empirical variability of rockwall retreat rates different studies from Alpine and Arctic Environments and also employ recently derived weathering rates from Mars are compared.

Important novel conceptual approaches to temporally and spatially decipher nonlinear effects on rock slope erosion including incision-related topographic stresses, rock fatigue, paraglacial and paracratering effects etc. and how they could contribute to a more uniform understanding of rockwall retreat are discussed.

Since 2012, Prof. Michael Krautblatter leads the newly founded research unit „Landslides” at the TU Munich. Together with his PostDocs and PhDs, he investigates the short- mid-, and longterm prediction possibilities for landslides. He studied Geology and Geography at the Universities in Passau (D), Durham (UK) and Erlangen (D). Following on, he worked at the University of Oxford (UK) and Bonn. In 2009 he finalized his PhD on alpine permafrost and its destabilization effects with distinction at the University in Bonn.

Organisiert von
Arbeitsgruppe *Geomorphologische Systeme und Risikoforschung*
Institut für Geographie und Regionalforschung
Universität Wien