



EINLADUNG ZUM VORTRAG im Rahmen des Forschungsseminars (Doktoratsstudium) SS 2011

## am MONTAG, 11. APRIL 2011, 17 UHR c.t.

INSTITUT FÜR GEOGRAPHIE UND REGIONALFORSCHUNG Universität Wien • Universitätsstr. 7/5 • 1010 Wien

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## SHOULD WE TRUST THE SEDIMENTARY RECORD?

Sedimentary records are widely used to infer causes of change in drainage basins. These are predominantly climate change, tectonics and land cover changes. However, recent work has suggested that internal non linear – or autogenic – processes can cause considerable variation in sediment delivery on their own. This lecture explores how all these factors interact to shape catchment geomorphology and sediment delivery, and how this affects the sedimentary record. It then discusses whether or not we can trust this record and if it can reliably be used to reconstruct past changes in our environment.

Tom Coulthard is Professor of Physical Geography at the University of Hull, with a strong research pedigree in modelling environmental systems, specialising in distributed and cellular modelling of fluvial and landscape systems. Notably, he has pioneered the development of reduced complexity cellular models to simulate how river morphology alters in response to climate change. His research interests are diverse, spanning from modelling the impacts of environmental change, metal contamination in river systems and the impacts of vegetation on fluvial geomorphology.

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