



human development in landscapes
GRADUATE SCHOOL AT THE UNIVERSITY OF KIEL

BIWEEKLY COLLOQUIUM
Monday, 02nd of April 17.00

**LONG-TERM PERSPECTIVE ON HUMAN IMPACT ACROSS ECOSYSTEMS:
INSIGHTS FROM THE PALAEOECOLOGICAL RECORD**

**Dr. Daniele Colombaroli – Oeschger Centre for Climate Change Research
& Institute of Plant Sciences - University of Bern (Switzerland)**

The study of long-term ecosystem changes usually requires data over the decadal time scale. Environmental proxies from lake sediments (e.g. pollen, macrofossils, charcoal) can provide useful information to understand how ecosystems responded to past human impact and climate variability at decadal to millennial time scales. Also, in areas where archeological evidences are scarce, the palaeo-record can help to assess the timing and extent of human-induced disturbances on landscapes. Here I provide several case studies from alpine, Mediterranean and tropical areas, to show the response of ecosystems to increasing land use, deforestation and anthropogenic fires during the last 10,000 years. Combining ecological, paleoecological and modeling approaches are relevant for our understanding of the natural variability, the resilience of forest ecosystems and their response to future climatic changes.

Venue: Lecture room 204, Leibnizstraße 1, CAU Kiel