



**SFB 754**

**Sonderforschungsbereich 754  
Climate-Biogeochemistry Interactions in the Tropical Ocean**

SFB 754 colloquium: Tuesday, 9th Sept, 10:15h

Lecture Room (Hörsaal westhore)

**Sam Jaccard, ETH Zurich, Switzerland**

<http://www.earthsci.unibe.ch/people/jaccard/jaccard.php?PID=10789180>

Title:

*Deglacial weakening of the oceanic soft tissue pump: global constraints from nitrogen isotopes and oxygenation proxies*

Abstract:

A new global analysis of marine oxygen and nitrogen proxies provides a broad perspective on how the oceanic sequestration of CO<sub>2</sub> by the marine ecosystem weakened over the end of the last ice age. The results are consistent with a release of CO<sub>2</sub> to the atmosphere that was front-loaded early in the deglaciation, caused by declining iron fertilization, accelerating organic matter remineralization, and increasing deep ocean ventilation. The 'bipolar see-saw', on the other hand, dominated transient deglacial changes in the biological pump.