UNIVERSITÄT
BERN

Klima- und Umweltphysik, Sidlerstr. 5, CH-3012 Bern

Physikalisches Institut
Klima- und Umweltphysik

The Division of Climate and Environmental Physics, Physics Institute, University of Bern opens a position for a

PostDoc (2 years):
Ocean biogeochemical data assimilation

A fascinating challenge is the quantification of ocean dynamics and ocean biogeochemical fluxes for a better understanding of carbon cycle-climate feedbacks and for improved climate projections. We offer the opportunity to assimilate biogeochemical tracers into the Bern3D Earth System Model of Intermediate Complexity. Work will build on earlier efforts using Ensemble Kalman Filter and Monte Carlo approaches. A first objective is the assimilation of alkalinity data to constrain calcium carbonate and alkalinity fluxes within the ocean.

The research is funded by the integrating project “Changes in carbon uptake and emissions by oceans in a changing climate (CARBOCHANGE)” of the European Commission. The work is linked to our efforts to further advance the Bern3D Earth System Model and data-assimilation capabilities, and to the Working Group on 'Carbon Cycle Data Assimilation: How to consistently assimilate multiple data streams' by the International Space Science Institute. The PostDoc will also become a member of the Oeschger Centre for Climate Change Research of the University of Bern. The salary is according to the guidelines of the Swiss National Science Foundation. Project start is preferentially early 2013.

We require a PhD in Physics, Oceanography, Environmental Sciences or similar disciplines. Experience in numerical modeling, proven writing skills, and the ability to fruitfully collaborate with others are essential.

Please send your electronic application in a single pdf file to Fortunat Joos (joos@climate.unibe.ch).

Bern, 28 January, 2013

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