Dear Colleagues,

We would like to draw your attention to the session 'Inverse Problems and Data Assimilation in Geosciences' (session NP5.2, Programme Group 'Nonlinear Processes in Geosciences') to be held during the upcoming General Assembly of the European Geosciences Union (Vienna, Austria, 22 – 27 April 2012).

This session will be devoted to all aspects of inverse problems and data assimilation in geophysics. A detailed description is given below.

The deadline for submission is 17 Jan 2012, 24:00 CET.

Limited financial support is available to assist participants in the General Assembly. The deadline for submission of request for financial support is 15 December 2011, 24:00 CET.

General information on the General Assembly, in particular instructions for submitting abstracts and information on financial support, is available at the address

## http://meetings.copernicus.org/egu2012/

Please forward this announcement to colleagues you think may be interested.

With regards,

Olivier Talagrand Peter Jan van Leeuwen Jeannot Trampert Conveners \*\*\*\*\*\*\*\*\*\*\*\*

Description of the session

Inverse Problems are encountered in most fields of the Geosciences, either for the purpose of prediction or inference. One class of inverse problems, in the context of predictability, is assimilation of observations in dynamical models of the system under study.

This session will be devoted to the presentation and discussion of methods for inverse problems and data assimilation, in ocean and atmosphere dynamics, solid earth geophysics, atmospheric chemistry, hydrology and, more generally, in all fields of geophysics.

We encourage reports on methods and recent developments of mathematical aspects of inverse problems, particularly in situations when a local linear hypothesis is not valid. Contributions dealing with algorithmic aspects and numerical implementation of the solution of inverse problems are welcome.

While prediction and inference in the geosciences are difficult in their own right, assessing uncertainty is proving to become more and more important. We specifically encourage contributions which quantify the uncertainty in inverse and data assimilation problems.