Postdoc position in Data Assimilation
Nansen Environmental and Remote Sensing Center
Bergen Norway

The Nansen Environmental and Remote Sensing Center (NERSC) is an independent non-profit research foundation in Norway affiliated with the University of Bergen. The Center conducts multidisciplinary marine, cryosphere and atmospheric research with integration of modelling, data assimilation and service development. More information at www.nersc.no

A Postdoctoral position is open in the framework of the project ***DASIM II*** (www.nersc.no/project/dasim) funded by the USA Office of Naval Research and coordinated by *Alberto Carrassi* (www.nersc.no/staff/alberto-carrassi). The project is a collaboration between the data assimilation group and the sea-ice modelling group at NERSC (Norway) and the Department of Mathematics at University of North Carolina in Chapel Hill (USA).

NERSC invites applications from highly motivated candidates holding a PhD degree in applied mathematics, physics or glaciology. The Postdoctoral candidate will study novel **data assimilation methods for numerical models using a time-varying mesh, possibly Lagrangian and non-conservative**. In particular, the main task will be the development of an ensemble-based data assimilation system for the state-of-the-art sea ice model, ***neXtSIM***, developed in-house at NERSC. DASIM II follows the project DASIM I devoted to studying the probabilistic, ensemble-based, forecast skill of *neXtSIM*. The Postdoc candidate will work on a unique interdisciplinary problem at the crossroad of numerical modelling, data assimilation and sea-ice physics, and will work side by side with a Postdoctoral scientist employed in the companion project REDDA.

The Postdoc will be supervised by *Alberto Carrassi* from the data assimilation group, and co-supervised by *Pierre Rampal* (leader of the sea-ice group at NERSC) and *Laurent Bertino* (leader of the data assimilation group at NERSC). The data assimilation group performs research in a broad range of problems, from the theory to applications of data assimilation, in particular with the Ensemble Kalman Filter. Its long-lasting collaborations with other data assimilation experts in Bergen make it a favourable studying environment. The sea ice modelling group works on the physics of sea ice and its role in the polar climate system, combining numerical model developments and satellite remote sensing. Another important activity of the group is the development of a forecasting platform around the new, state-of-the-art, sea ice model *neXtSIM.*

Candidates with a background in data assimilation and/or in sea-ice modelling will be given priority. Programming skills, in Python, Matlab and C++ are desirable, as well as both writing and oral fluency in English. Female applicants will also be given priority for an equal level of qualifications.

The appointment will be for three years, with a 6 months' probation period. Salary follows the Norwegian Civil Service for Postdocs (pay-grades 57-65 *i.e.* NOK 490 900 – 569 000) and will be adjusted based on qualifications.

We can offer:
- a highly qualified international workforce
- a good working environment, with focus on social activities
- agreement on flexible working hours

Deadline for applications: 30 July 2018.
Expected start: The earliest possible.

Please send an application consisting of a CV, a motivation letter in which you describe your study and/or research activity up-to-date and your interest in the position, as well as the contacts of at least two references persons, by e-mail to admin@nersc.no with CC to alberto.carrassi@nersc.no and pierre.rampal@nersc.no. Include in the subject line *"Application for DASIM II Postdoc position".*