PhD grant in sea ice modelling available at the Université catholique de Louvain, Louvain-la-Neuve

Within the APPLICATE EU project, the Georges Lemaître Centre for Earth and Climate Research (www.uclouvain.be/teclim) / Earth and Life Institute of the Université catholique de Louvain, Louvain-la-Neuve, Belgium is seeking a PhD student for 42 months.

APPLICATE (Advanced Prediction in Polar regions and beyond: modelling, observing system design and LInkages associated with ArctiC ClimATE change) is a 4-year project, funded by the European Commission under the Horizon 2020 program, and coordinated by the Alfred Wegener Institute, Bremerhaven (16 partners), that aims at advancing our ability to model and predict the Arctic climate system along with its impacts on the weather and climate in lower latitudes (www.applicate.eu).

The successful candidate will contribute to improve the Louvain-la-Neuve sea ice model (LIM; www.elic.ucl.ac.be/repomodx/lim/), which is part of the Nucleus for European Modelling of the Ocean (NEMO; www.nemo-ocean.eu) platform, by incorporating in this model subgrid-scale snow thickness and ice floe size distributions together with a comprehensive representation of lateral ice melting and form drag. He/she will also assess the impact of these changes on the ability of the EC-Earth general circulation model (www.ec-earth.org), which includes NEMO-LIM, to predict the Arctic weather and climate on short timescales (one month to one year).

Required qualifications:

Completed MSc or equivalent (5 years) in glaciology, physical oceanography, climatology, physics, applied mathematics or related fields;

Experience using complex numerical models and good computational programming, post-processing and data management skills;

Demonstrated verbal and written communication skills (in English) necessary to work in a multidisciplinary team environment, author technical and scientific reports and publications, and deliver scientific presentations.

The PhD grant is for 42 months, starting as soon as possible, with a net monthly salary of about 1850 EUR. This includes social insurances.

Applicants should send (i) a statement of research experience, qualification and interest, (ii) a complete CV including a list of publications, and (iii) two letters of recommendation via e-mail to Prof. Thierry Fichefet (thierry.fichefet@uclouvain.be).

The call is open until the position is filled.