

***Two-year postdoctoral position in Arctic climate modelling and prediction available at the Université catholique de Louvain, Louvain-la-Neuve, Belgium***

The Georges Lemaître Centre for Earth and Climate Research (TECLIM; [www.uclouvain.be/teclim](http://www.uclouvain.be/teclim)) / Earth and Life Institute of the Université catholique de Louvain (UCLouvain), Louvain-la-Neuve, Belgium is looking for a **postdoctoral fellow** to address the challenge of **modelling the Arctic climate system and predicting its evolution on seasonal to multi-decadal time scales**.

The successful candidate will (1) assess the impact of improvements recently made to the **Louvain-la-Neuve sea ice model** (inclusion of a multi-layer snow scheme, a melt pond scheme, a form drag parameterisation and a land-fast ice module), which is part of the Nucleus for European Modelling of the Ocean (NEMO; [www.nemo-ocean.eu](http://www.nemo-ocean.eu)) platform, on Arctic climate simulations carried out with the **EC-Earth** General Circulation Model ([www.ec-earth.org](http://www.ec-earth.org)), and (2) explore with EC-Earth the benefit of using initialization techniques based on **ensemble data assimilation** for skilful Arctic climate coupled **predictions on seasonal to decadal time scales**.

The researcher will be supervised by Profs Thierry Fichefet and François Massonnet, and will work in a **highly stimulating environment with internationally recognized expertise** in sea ice modelling, polar prediction, and climate model evaluation. The work will partly be conducted in the framework on the **APPLICATE EU project** (Advanced Prediction in Polar regions and beyond: Modelling, observing system design and Linkages associated with Arctic Climate change; [www.applycate.eu](http://www.applycate.eu)). APPLICATE is a Horizon 2020 4-year project funded by the European Commission 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.

The successful candidate should have a PhD in large-scale climate, sea ice, or ocean modelling, with strong interests for prediction aspects. Experience in data assimilation in geophysical systems is a plus. Advanced programming, post-processing, and data management/analysis skills are required. He/she should be fluent in English due to the multiple interactions planned with other APPLICATE partners during the project and should have demonstrated ability in team working.

The position is offered for **two years** from September 2019, with the possibility of an extension. The salary will be commensurate with experience according to the UCLouvain rates.

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 Profs Thierry Fichefet ([thierry.fichefet@uclouvain.be](mailto:thierry.fichefet@uclouvain.be)) and François Massonnet ([francois.massonnet@uclouvain.be](mailto:francois.massonnet@uclouvain.be)).

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