

SUPERVISING THE TECHNICAL DEVELOPMENTS OF A CLIMATE MODEL CONFIGURATION

A consortium of five Belgian universities is seeking a scientist to supervise the technical developments of a climate model configuration in the framework of the PARAMOUR project (Decadal Predictability and vAriability of polar climate: the Role of AtMosphere- Ocean-cryosphere mUltiscale inteRactions) funded by the program EOS –The excellence of Science. PARAMOUR aims at revealing fundamental drivers of climate variability and assessing climate predictability in high latitudes by using coupled regional climate models in both hemispheres.

The climate of the Polar Regions has dramatically changed over the last decades. This may have resulted from external forcing (e.g., from greenhouse gas emissions), but also from natural interaction between the components of the climate system (notably, the atmosphere, the marine and continental cryosphere, and the ocean). Quantifying the specific contribution of each is critical to understand decadal variability. Based on the complementary scientific expertise of the project partners, PARAMOUR aims at revealing fundamental drivers of climate variability and assessing the predictability in high-latitudes by using coupled regional climate models in both hemispheres.

Responsibilities

The successful candidate will supervise the development of a coupled atmosphere-ocean-sea ice-ice sheet model covering the Totten glacier region and will be in charge of the technical aspects of the coupling between the different models as well as the installation and optimization of the coupled model on high performance computers. This will be done in close collaboration with the scientists working within the PARAMOUR consortium:

http://www.climate.be/php/users/klein/PARAMOUR/open_positions.html

Profile

Required qualifications:

- To have a Master degree, a PhD or equivalent experience in computer science, earth – and environmental science, climatology or related field (geography, meteorology physics, mathematics, informatics, bioscience engineering, civil engineering, etc.);
- To have extensive experience in computational programming (C, Fortran or Python) in a Linux environment;
- To have experience in implementing and debugging prototype numerical algorithms, optimizing for speed and memory usage;
- Demonstrated ability to manage large data sets and implement modular data post-processing software in a Bash/Python/GitHub environment;
- Experience with high performance computing (Slurm, MPI, ...);
- Experience with climate models is an asset;
- To have demonstrated verbal communication skills in English;
- To have interest in working in a multidisciplinary team environment;

Offer

Computer scientist or Post Doctoral researcher

Around September 1, 2018

Full time position for 24 months

Location: Department Earth and Environmental Sciences, KU Leuven, Leuven, Belgium

Interested?

Applicants should send (i) a statement of experience, qualification and interest, (ii) a complete CV, (iii) academic transcripts and (iv) the names and e-mail of at least two references to the online application system of KU Leuven. Review of the applications will start immediately and the call is open until the position is filled. For more information please contact Prof. dr. Nicole Van Lipzig, tel.: +32 16 32 64 53, mail: nicole.vanlipzig@kuleuven.be.

You can apply for this job no later than May 01, 2018 via the online application tool

<https://www.kuleuven.be/personeel/jobsite/jobs/54556540>

Application via email will not be considered

KU Leuven seeks to foster an environment where all talents can flourish, regardless of gender, age, cultural background, nationality or impairments. If you have any questions relating to accessibility or support, please contact us at diversiteit.HR@kuleuven.be.