



Post-doctoral position on statistical emulation of a cloud-scale model

Finnish Meteorological Institute (FMI) is both an international research institute and a 24/7 operational weather service located in Helsinki, Finland. It currently employs over 300 full time researchers working on weather and climate, atmospheric composition, high latitude and polar oceans, and cryosphere.

The Climate System Modelling Group seeks a highly motivated individual for a post-doctoral position in the project "Emulation of subgrid-scale aerosol-cloud interactions in climate models: towards a realistic representation of aerosol indirect effect (ECLAIR)" funded by the European Research Council. The overall aim of ECLAIR is to build fast statistical surrogates (emulators) of a cloud-resolving model and implement them into climate simulations.

The currently open position will focus on 1) design and validation of the emulators, and 2) probabilistic sensitivity analysis of cloud-scale aerosol indirect effect. The position is for the time period from January 2019 until the end of August 2020 (start date can be negotiated), and will require the researcher to participate in international collaboration, including research visits abroad.

Qualifications

Candidates with a PhD degree or equivalent (completed before the start of the contract) in relevant fields (e.g., applied mathematics, environmental statistics, geosciences) will be considered. Furthermore, a successful candidate must meet the following essential criteria:

- Strong background in Bayesian analysis
- Experience in handling of large datasets
- Written and spoken fluency in English
- Willingness to work internationally (including research visits abroad)
- Good computer, communication and organizational skills
- Ability to carry out independent research as well as work as part of a team

Other desirable qualifications are:

- Experience in statistical emulation methods in environmental sciences
- Experience in numerical programming
- Experience in non-stationary modeling
- Coding experience in Matlab & Fortran
- Good understanding of aerosol-cloud interactions

The position is for the time period from January 2019 until the end of August 2020 (start date can be negotiated). Salary will be based on experience and performance according to the FMI salary scale (approximately 42,000 € to 46,800 € per annum).

For more details, please contact the Head of the Climate System Modelling Group, Antti-Ilari Partanen, antti-ilari.partanen@fmi.fi or tel. +358 50 532 2942) or Director, Hannele Korhonen (hannele.korhonen@fmi.fi or tel. +358 40 842 4852).

To apply, send a short application together with CV, list of publications and max. 3 references to <https://www.valtiolle.fi/en-US/vacancy?id=31-141-2018> by 26 September 2018 at 14 p.m. (EET).

You must register and create an account to Valtiolle.fi recruiting system before leaving your application. (Login to Applications <https://haku.valtiolle.fi/Public/Login/Applicant.aspx>).