

PhD student position in numerical modeling of clouds

The Microphysics of Clouds research group at the Institute of Geophysics is searching for a PhD student to work in a project entitled "Untangling microphysical impacts on shallow convective clouds" funded by the Polish National Science Centre.

The successful candidate will join the research group on Microphysics of Clouds at the IGFUW. The group investigates the dynamics of convective clouds in a wide range of spatial and temporal scales: from the detailed microphysics of individual aerosol and cloud droplets (activation, growth by condensation, and collision-coalescence), to the motion of the whole cloud. The group develops and applies the University of Warsaw Lagrangian Cloud Model (UWLCM), where the cloud-scale flow computed by Large-Eddy Simulations is coupled with a Lagrangian description of the cloud-particle microphysics.

The PhD research tasks include evaluation of impact of microphysical parameters and processes on cloud global structure. Various numerical options of UWLCM will be tested to clearly separate numerical aspects from the model physics.

We offer

- 3000 PLN (about 700 €) per month net scholarship funded by the National Science Centre in addition to a scholarship that can be awarded to the best applicants for PhD program at the University of Warsaw (see **Applications**)
- collaboration with partners from USA and Japan
- opportunity to travel to international conferences and summer schools

Requirements

- MSc in physics, mathematics, informatics, engineering, Earth sciences or related field (MSc degree must be obtained no later than September 2019)
- knowledge of Linux OS and C++ programming language
- good command of written and spoken English
- experience in numerical modeling of physical processes will be advantageous

Applications

Applications, consisting of a CV, cover letter, diplomas and contact information for at least one reference person, should be submitted by email to hanna.pawlowska@fuw.edu.pl no later than 21.06.2019.

The candidate will need to be enrolled in one of the Doctoral Schools of Exact and Natural Sciences at the University of Warsaw. We encourage candidates to apply for Earth and Environmental Sciences or Physical Sciences Doctoral School.

Candidates will be informed about the outcome of the procedure not later than on 16 July 2019.