



DLR – DAAD Fellowships

Fellowship No. 401

Research Area :	Space
Research Topic:	Radiative transfer models for simulating space-borne observations
DLR Institute:	Remote Sensing Technology Institute (IMF) at DLR Oberpfaffenhofen
Position:	Doctoral Fellow
Openings:	1
Job Specification:	<p>The institute's Atmospheric Processors section conducts research on atmospheric remote sensing with infrared and ultraviolet spectrometers. Research on the mathematical and physical basics of atmospheric remote sensing is focused on radiative transfer modelling, mathematics of inversion, and electromagnetic scattering.</p> <p>The new generation of hyper-spectral atmospheric composition sensors calls for enhanced physical models to better agree with spectral radiances measured at the top of our Earth's atmosphere. The PhD-project is committed to consider in more detail physical effects such as sub-pixel inhomogeneities, polarization effects, non-spherical particles etc. with the aim to better understand the underlying radiative transfer mechanisms. The gained knowledge will then be shared to enhance our family of generic radiative transfer tools. The final step of the project is to yield dependable information on the accuracy of physical models and to connect this with current operational retrieval algorithms.</p> <p>A successful PhD student is expected to be in touch with leading scientific teams working on radiative transfer throughout the world.</p> <p>We are striving to increase the proportion of female employees and therefore particularly welcome applications from women. Disabled applicants with equivalent qualifications will be given preferential treatment.</p>

- Required Qualification:** Master in physics, mathematics, computer science, or in a similar field.
Good programming skills in a Unix/Linux environment.
We expect from the candidate some background in atmospheric remote sensing or parallel computing, as well as committed and cooperative attitude.
- Advantageous Skills:** Knowledge and experience in Monte-Carlo simulations, remote sensing measurements, retrieval techniques.
- English competence:** See requirements on www.daad.de/dlr
Fluent in spoken and written English
- Earliest Start Date:** As soon as possible
- Application Deadline:** Until position filled
- Further Information:** <http://www.dlr.de>
<http://www.daad.de/dlr>