Jobbnorge-ID: 149185
Søknadsfrist: Avsluttet
Nettside:
Omfang:
Varighet:

PhD position in Atmospheric Physics

A PhD position within the field of atmospheric physics is available at the Department of Physics at the Norwegian University of Science and Technology (NTNU). The appointment has a duration of 3 years with a projected start in August 2018. There is the possibility of 1 year extension with 25% teaching duties in agreement with the Department.

Job description
The PhD program will be hosted by the Atmospheric and Environmental Physics group at NTNU, Trondheim, in close collaboration with NORSAR and the Norwegian Institute for Air Research (NILU) which both share a campus at Kjeller, near Oslo. You will be based at NTNU in Trondheim for half the project timespan and then with NORSAR in Kjeller for the other half.
The research will involve the development of combined interpretation methods for atmospheric infrasound and meteor radar datasets. The purpose is to use these datasets to derive the winds and temperatures in the middle atmosphere in order to constrain high-top atmospheric models; to map the middle atmospheric dynamics; and to explore the coupling between atmospheric layers. There will be special focus on extreme events such as Sudden Stratospheric Warmings, which are known to be able to influence weather patterns. A key ambition is to contribute to improved medium-range weather forecasting.
The position is part of the project, Middle Atmosphere Dynamics: Exploiting Infrasound Using a Multidisciplinary Approach at High Latitudes, financed by the Research Council of Norway basic research program “FRIPRO”. This project is coordinated by NORSAR, and involves 7 institutes in Norway, The Netherlands, Sweden, Great Britain, and France. The position will hence provide abundant opportunities for travel and scientific collaboration with both international and Norwegian communities. You will have the experience to work in both the academic and research-institute environments, interacting with researchers at the international forefront of their respective fields. The project funds include travel and housing support to enable extended visits to Kjeller, while you are based in Trondheim, and vice versa. You will receive tuition in both observational and computational techniques and special emphasis will be placed on dissemination in scientific channels (e.g., at the European Geosciences Union General Assembly, EGU) and popular media.
Detailed information on the NTNU PhD programs is found at: https://www.ntnu.edu/nv/phd

Qualifications
The applicant must have an MSc or equivalent in the physical sciences and a documented background in either atmospheric science, space physics, acoustics and wave propagation, or similar fields. We expect the candidates to have strong data analysis, statistical, and programming skills. Experience in atmospheric characterization and simulation, medium/long range weather forecasting / probabilistic forecasting, climate modelling, or data assimilation will be an advantage. Also, knowledge of atmospheric forecast, analysis and re-analysis products will count as a merit.
The successful candidate should be creative, self-motivated and have good problem-solving and writing abilities. He/she should also enjoy interdisciplinary research and take keen interest in learning and working in teams.

The regulations for PhD programs at NTNU state that a Master degree or equivalent with at least 5 years of studies and an average grade of A or B within a scale of A-E for passing grades (A best) for the two last years of the MSc is required. Candidates from universities outside Norway are kindly requested to send a Diploma Supplement or a similar document, which describes in detail the study and grade system and the rights for further studies associated with the obtained degree:
http://ec.europa.eu/education/tools/diploma-supplement_en.htm

The position requires spoken and written fluency in the English language. Applicants from non-English-speaking countries must document English skills by an approved test or during their interview. Approved tests are TOEFL, IELTS and Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of Proficiency in English (CPE).

Information about the department of Physics at NTNU
The position is organized in the Department of Physics. Currently, there are 27 professors, 14 associate professors, 4 adjunct professors, 70 PhD research fellows and 16 postdoctoral positions appointed at the Department of Physics.
Our research spans a broad spectrum of natural sciences and technology, which in turn allows us to offer an education that provides a solid basis for future careers. Physics research is carried out in experimental as well as theoretical fields, often across conventional boundaries between disciplines. Research staff at the institute make a special effort to increase the awareness and understanding of the importance and impact of physics in our society.
Further information about the department is available at: https://www.ntnu.edu/physics

Information about NORSAR
NORSAR is a not-for-profit research foundation located at Kjeller outside of Oslo, Norway, and operates key seismic and infrasound arrays of the global network for monitoring compliance with the Comprehensive Nuclear-Test-Ban Treaty - CTBT.
NORSAR conducts research, development and advanced consultancy to the public sector and private cus-tomers in the fields of geophysics, seismology, seismic modelling, microseismic- and explosion monitoring, atmospheric infrasound, and earthquake engineering. Read more at: www.norsar.no

Terms of employment
The appointment of the PhD fellow will be made according to Norwegian guidelines for universities and university colleges and to the general regulations regarding university employees. Applicants must agree to participate in organized doctoral study programs within the period of the appointment and have to be qualified for the PhD-study.
NTNU has a personnel policy objective that the staff must reflect the composition of the population to the greatest possible extent.
The position as PhD is remunerated according to the Norwegian State salary scale. There is a 2% deduction for superannuation contribution.

Further information can be obtained from:
- Professor Patrick Espy (PhD supervisor from NTNU), Department of Physics: patrick.espy@ntnu.no
- Dr. Sven Peter Näsholm (project principal investigator / PhD supervisor, NORSAR): peter@norsar.no
- Dr. Yvan Orsolini (PhD supervisor from NILU): yvan.orsolini@nilu.no

The application
Applications with a letter describing the candidate's motivation, skills and personal qualifications for the position, together with a CV and certificates from both Bachelor and Master and the contact details for at least two referees should be submitted electronically.

Applications must be submitted electronically through this page. **Applications submitted elsewhere will not be considered.**
The reference number of the position is: **NV-28/18**

Application deadline: 15 May 2018

Tilleggsinformasjon

Arbeidssted: