

**Jobbnorge-ID:** 151332

**Søknadsfrist:** Closed

**Nettside:**

**Omfang:**

**Varighet:**

## PhD position in Statistical Properties of Extremes (IE-073-2018)

[Norwegian University of Science and Technology \(NTNU\)](#) has a vacancy for a 100% position as a PhD research fellowship affiliated with the [Department of Mathematical Sciences \(IMF\)](#) at [Faculty of Information Technology and Electrical Engineering \(IE\)](#).

This position is one of 5 positions within the project World of Wild Waters (WoWW): <https://www.jobbnorge.no/ledige-stillinger/stilling/151261>, and <https://www.ntnu.edu/digital-transformation>.

The project is in NTNU's strategic portfolio of projects to pursue transformative research on the development and application of digital transformation technology. Multi-disciplinarity is a key objective in all the projects and the positions in WoWW are at four departments at three faculties. A close cooperation between the PhD research fellows and the departments will be the backbone of WoWW.

### About World of Wild Waters - WoWW:

WoWW is focused on gamification of Natural Hazards and aim at bringing together knowledge on the physical and statistical behavior of Natural Hazards with knowledge on digital storytelling and human behavior to create an immersive user experience based on real data, realistic scenarios and simulations. Experiences stakeholders, planners, decision makers and emergency agencies can base their preventive and emergency measures at to safe live and cost. WoWW aim at being the future tool for analyzing and communicating the potential causes and effects of Natural Hazards as floods and landslides. This is a possibility to shaping the future way of working at a field of high societal importance.

### Information about the Department

The [Department of Mathematical Sciences](#) has 35 full professors, 20 associate professors and 4 assistant professors. In addition, there are 2 adjunct professors, 5 adjunct associate professors, about 20 postdoctoral fellows and about 60 doctoral students. There are 11 women in tenured positions. The department has five research groups: algebra, analysis, differential equations and numerical analysis, geometry and topology, and statistics.

### Work description:

The key focus of the PhD position is on developing tools that enable to simulate extreme weather events that can lead to natural disaster. Dependencies in space and time, as well as between variables (e.g. precipitation and temperature) are of fundamental importance for the simulated scenarios to be realistic. Computational feasibility is another key aspect to be covered.

### Qualifications

The applicants should have a MSc-degree in statistics or comparable competence, have a strong background in multivariate statistics, have experience with programming, good communication skills and interest in working in a cross-disciplinary team. It is an advantage, but it is not required, to have experience with spatial statistics, extreme statistics, combining statistical and physical models and experience with cross-disciplinary research.

Candidates completing their MSc-degree in the Spring 2018 are encouraged to apply. The position is also open for integrated PhD for NTNU students starting their final year of their master degree in Autumn 2018, see <https://www.ntnu.no/ie/forskning/integrertphd> for information about integrated PhD.

In particular, admission to PhD education at NTNU requires an average grade of at least B, within a scale of A-E for passing grades (A best), for the last two years of the master's degree.

The goal of the positions is to obtain a PhD degree. Applicants will engage in an organized PhD training program, and appointment requires approval of the applicants plan for a PhD study within three months from the date of commencement.

The appointment is for 4 years, including 25% teaching assistance.

See here for regulations concerning appointment and promotion to teaching and research posts:

<https://www.regjeringen.no/no/dokumenter/regulations-concerning-appointment-and-promotion-to-teaching-and-research-posts/id2519258/>

### Language requirements

The main working languages are Norwegian and English. As the informants are mostly Norwegian, skills in a Scandinavian Language is desired, but not required. Applicants who do not master a Scandinavian language must provide evidence of good English language skills, written and spoken. The following tests can be used as such documentation: TOEFL, IELTS or Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of Proficiency in English (CPE). Minimum scores are:

- TOEFL: 600 (paper-based test), 92 (Internet-based test)
- IELTS: 6.5, with no section lower than 5.5 (only Academic IELTS test accepted)
- CAE/CPE: grade B or A.

## Formal regulations

Appointments are made in accordance with the regulations in force regarding terms of employment for PhD candidates issued by the Ministry of Education and Research, with relevant parts of the additional guidelines for appointment as a PhD candidate at NTNU. Applicants must undertake to participate in an organized PhD programme of study during their period of employment. The person who is appointed must comply with the conditions that apply at any time to employees in the public sector. In addition, a contract will be signed regarding the period of employment.

Applicants must be qualified for admission as PhD students at NTNU. See <http://www.ime.ntnu.no/forskning/phd> for information about PhD studies at NTNU. Together with the application, include a description of the research work that is planned for completion during the period of the grant.

## Salary conditions

The position is in code 1017 Research fellow, and is remunerated at a gross NOK 436.900 - 537.700 per year, depending on qualifications. A deduction of 2% is made as a statutory contribution to the Norwegian Public Service Pension Fund.

## General

We can offer

- an informal and friendly workplace with dedicated colleagues
- academic challenges
- attractive schemes for housing loan, insurance and pension in the Norwegian Public Service Pension Fund

The Faculty of Information Technology and Electrical Engineering wants to attract outstanding and creative candidates who can contribute to our ongoing research activities. We believe that diversity is important to achieve a good, inclusive working environment. We encourage all qualified candidates to apply, regardless of the gender, disability or cultural background. We encourage especially women to apply.

The appointment is subject to the conditions in effect at any time for employees in the public sector, and assessments regarding the legislations regulating export control and knowledge transfer.

Under Section 25 of the Freedom of Information Act, information about the applicant may be made public even if the applicant has requested not to have his or her name entered on the list of applicants.

For further information, contact Sara Martino, [sara.martino@ntnu.no](mailto:sara.martino@ntnu.no) or the or the leader of Woww project Professor Oddbjørn Bruland Email: [oddbjorn.bruland@ntnu.no](mailto:oddbjorn.bruland@ntnu.no)

See <https://www.ntnu.edu/iv/doctoral-programme> for more information.

## The application

The application must be sent electronically through this page ( [www.jobbnorge.no](http://www.jobbnorge.no)) with information about education and relevant experience (preferably, all in one combined PDF file). Mark the application with the IE code given below.

The application must contain:

- Curriculum vitae (CV) with information about the candidate's prior training, exams, and work experience
- Certified copies of transcripts and diplomas
- Applicants from universities outside Norway are kindly requested to send a diploma supplement or a similar describes in detail the study and grading system and the rights for further studies associated with the obtained degree
- Research statement (max. 3 pages) including:
  - A short presentation of the motivation for a PhD study
  - How the applicant sees his/her background suitable,
  - The applicant's view of research challenges within the area of the PhD position
- Names and contact information of at least 2 reference persons
- A copy of the master thesis (in PDF), or, for those who are near to completion of their MSc, an extended abstract combined with a statement of how and when the applicant plans to complete the thesis (1 page, delivery of master thesis no later than June 30th.)

Incomplete applications will not be considered.

Start-up date October 2018 or as soon as possible.

More information regarding moving to Trondheim, Norway, and working at NTNU: <http://www.ntnu.edu/nirs>

**Application deadline is May 27, 2018**

**Mark the application: IE-073-2018**

## Tilleggsinformasjon

**Arbeidssted:**