

NTNU - knowledge for a better world

The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

**Faculty of Information Technology, Mathematics and Electrical Engineering
Department of Mathematical Sciences (IMF)**

2 PhD Positions in Statistics

As part of the research project *Knowledge based Non-Stationary Modeling* we announce two PhD positions available from August 1st, 2016. The successful candidates will be offered a three-year position. NTNU may offer a six to twelve month extension as a teaching assistant.

The starting point for this project is selected challenges in quantitative genetics and hydrology that call for non-stationary modeling. Inspired by these challenges the primary objectives are to 1) develop non-stationary statistical models based on system knowledge, 2) gain knowledge about and develop methodology for studying and improving practical identifiability of parameters in such models, and 3) develop methodology for evaluating predictions, and investigate when predictions are improved in comparison to stationary models. There are two PhD-projects and one Postdoctor-project.

PhD-project 1: Non-stationary models in quantitative genetics for incorporating pedigree and SNP data.

PhD-project 2: Non-stationary spatial modeling for streamflow characteristics for ungauged basins.

Qualifications:

The applicants should have a MSc-degree in statistics, or quantitative genetics (PhD-project 1) or hydrology (PhD-project 2) or comparable competence, have a strong background in multivariate statistics and have experience with programming. It is an advantage, but it is not required, to have experience with spatial statistics, integrated nested Laplace approximations (INLA), SPDE-models, genetics (PhD-project 1) or hydrology (PhD-project 2). Candidates completing their MSc-degree in the Spring 2016 are encouraged to apply. Applicants who do not master a Scandinavian language must document a thorough knowledge of English (equivalent to a TOEFL score of 600 or more).

The PhD fellows will be part of the Department of Mathematical Sciences at NTNU and will have their workplace there. See <http://www.ntnu.no/imf>. The Department currently has around 60 PhD fellows.

For further information, please contact Ingelin Steinsland by phone (+4773550239) or e-mail (ingelins@math.ntnu.no).

The regulations for PhD programs at NTNU state that a Master degree or equivalent with at least five years of studies and an average grade of A or B within a scale of A-E for passing grades (A best) for the last two years of the MSc is required, and C or higher for the BSc. Candidates from universities outside Norway are kindly requested to send a Diploma Supplement or similar documentation, which describes in detail the program of study, the grading system, and the rights to further studies associated with the degree obtained.

The PhD fellowships are placed in salary code 1017, level 50 - 62 on the Norwegian government salary scale, gross income NOK 430 500 to 529 800 per year. From this salary, 2% will be deducted for mandatory membership in the National Pension Fund. Starting salary is expected to be at salary level 50.

The appointment of the PhD fellows 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 (see <http://www.ntnu.edu/ime/research/phd>).

Candidates will be required to enroll in a PhD program within the period of employment, and must sign a contract regulating the starting date and duration of employment as well as the required duties.

The positions adhere to the Norwegian Government's policy of balanced ethnicity, age and gender. NTNU wishes to increase the number of women in its workforce, and female candidates are therefore encouraged to apply.

The application must include information about education, examinations and earlier experience. Certified copies of academic diplomas and transcripts must be enclosed. Relevant scientific works should be included. Joint work will be considered provided that a short summary outlining the applicant's contributions is attached.

Applications are to be submitted electronically through this page. Preferably, the attachments should be submitted as a single file.

Reference no: IME 012-2016.

Closing date: 11.03.2016.

Jobbnorge-ID: 122167, Søknadsfrist: Avsluttet

