

**Jobbnorge ID:** 242943  
**Deadline:** 4/26/2023  
**Website:** <http://www.ntnu.no>  
**Scope:** Fulltime  
**Duration:** Project

The Department of Mathematical Sciences has a vacancy for

## A PhD fellowship in complex analysis and geometry

### This is NTNU

NTNU is a broad-based university with a technical-scientific profile and a focus in professional education. The university is located in three cities with headquarters in Trondheim.

At NTNU, 9,000 employees and 43,000 students work to create knowledge for a better world.

You will find more information about working at NTNU and the application process [here](#).

Video: <https://youtu.be/Xt-yHCN5QS0>

### About the job

A PhD fellowship in complex analysis and geometry, supervised by Xu Wang (co-supervised by Franz Luef), is available at the Department of Mathematical Sciences at NTNU starting in the fall of 2023. The successful candidate will be offered a three-year position without teaching; the Department may also offer a six- to twelve-month extension as a teaching assistant. The place of employment will be Trondheim, Norway. The PhD project will be conducted in the research group for Analysis at NTNU.

The successful candidate should work on Kähler geometry, with emphasis on the Hörmander L2 method, pluripotential theory and its applications to complex analysis, algebraic geometry, Gabor frames and other related areas. The concrete research tasks for the PhD project related to this announcement will be adapted to the applicant.

For a position as a PhD Candidate, the goal is a completed doctoral education up to an obtained doctoral degree.

### Duties of the position

- Undertaking the necessary courses (30 ECTS) as part of the PhD programme
- Submitting an application for admission and a research plan no later than 3 months after the employment
- Conducting high quality research and report progress on a regular basis and in agreement with the supervisors

### Required selection criteria

- The candidates must have a strong academic background from previous studies and an average grade from the master's degree program, or equivalent education, which is equal to B or better compared with NTNU's grading scale. If they do not have letter grades from previous studies, then they must have an equally good academic basis. If they are unable to meet these criteria, they may be considered only if they can document that they are particularly suitable for education leading to a PhD degree.
- A master degree within complex analysis and geometry.
- Good communication and collaboration skills and an independent, self-driven working style are essential.
- MSc students who expect to complete their master's degree studies by summer 2023 are also encouraged to apply. Employment will then be postponed until the master's degree is finished.
- The candidates must meet the requirements for admission to the [faculty's doctoral program](#).

The appointment is to be made in accordance with [Regulations on terms of employment for positions such as postdoctoral fellow, PhD candidate, research assistant and specialist candidate](#) and [Regulations concerning the degrees of Philosophiae Doctor \(PhD\) and Philosodophiae Doctor \(PhD\) in artistic research national guidelines for appointment as PhD, post doctor and research assistant](#)

### Preferred selection criteria

- Good written and oral English language skills.
- Strong background in Kähler geometry and in particular in Bergman kernels, Monge-Ampere operators and Kähler-Einstein metrics.

- Familiarity with the L2 Hodge theory.
- Interested in applications of Kähler geometry methods to other fields, for example Gabor frames and mathematical physics.

## Personal characteristics

- Ability to work independently
- Good communication skills
- Curious and open-minded
- High self-motivation

Emphasis will be placed on personal and interpersonal qualities.

## We offer

- exciting and stimulating tasks in a strong international academic environment
- an open and [inclusive work environment](#) with dedicated colleagues
- favourable terms in the [Norwegian Public Service Pension Fund](#)
- [employee benefits](#)

## Salary and conditions

As a PhD candidate (code 1017) you are normally paid from gross NOK 501 200 per annum before tax, depending on qualifications and seniority. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.

The period of employment is 3 years with no teaching, but the Department may offer a 4th year with teaching and other duties for approximately 25% of the entire 4-year period.

Appointment to a PhD position requires that you are admitted to the PhD programme in Mathematical sciences (see <https://www.ntnu.edu/studies/phma>) within three months of employment, and that you participate in an organized PhD programme during the employment period.

The engagement is to be made in accordance with the regulations in force concerning [State Employees and Civil Servants](#), and the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria in the latter law will be prohibited from recruitment to NTNU. After the appointment you must assume that there may be changes in the area of work.

It is a prerequisite you can be present at and accessible to the institution daily.

## About the application

The application and supporting documentation to be used as the basis for the assessment must be in English.

Publications and other scientific work must follow the application. Please note that your application will be considered based solely on information submitted by the application deadline. You must therefore ensure that your application clearly demonstrates how your skills and experience fulfil the criteria specified above.

The application must include:

- CV and certificates and diplomas.
- A copy of the master thesis, for those who are near the completion of their degree, or a short summary of the candidate's plans for the thesis (maximum 1 page).
- Research plan or project proposal.
- Name and contact information of up to three references.
- If available: Academic works - published or unpublished - that you would like to be considered in the assessment.

If all, or parts, of your education has been taken abroad, we also ask you to attach documentation of the scope and quality of your entire education, both bachelor's and master's education, in addition to other higher education. Description of the documentation required can be found [here](#). If you already have a statement from NOKUT, please attach this as well.

We will take joint work into account. If it is difficult to identify your efforts in the joint work, you must enclose a short description of your participation.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal and interpersonal qualities. Motivation, ambitions, and potential will also count in the assessment of the candidates.

NTNU is committed to following evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment - DORA](#).

## General information

[Working at NTNU](#)

NTNU believes that inclusion and diversity is our strength. We want to recruit people with different competencies, educational backgrounds, life experiences and perspectives to contribute to solving our social responsibilities within education and research. We will facilitate for our employees' needs.

NTNU is working actively to increase the number of women employed in scientific positions and has a number of resources to [promote equality](#).

**The city of Trondheim** is a modern European city with a rich cultural scene. Trondheim is the innovation capital of Norway with a population of 200,000. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

As an employee at NTNU, you must at all times adhere to the changes that the development in the subject entails and the organizational changes that are adopted.

A public list of applicants with name, age, job title and municipality of residence is prepared after the application deadline. If you want to reserve yourself from entry on the public applicant list, this must be justified. Assessment will be made in accordance with [current legislation](#). You will be notified if the reservation is not accepted.

If you have any questions about the position, please contact Xu Wang ([xu.wang@ntnu.no](mailto:xu.wang@ntnu.no)).

If you think this looks interesting and in line with your qualifications, please submit your application electronically via [jobbnorge.no](http://jobbnorge.no) with your CV, diplomas and certificates attached. Applications submitted elsewhere will not be considered. Upon request, you must be able to obtain certified copies of your documentation.

**Application deadline: 26.04.2023.**

## NTNU - knowledge for a better world

### 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.

### Department of Mathematical Sciences

We are Norway's largest university environment in mathematical sciences. The Department has a particular responsibility for all basis education in mathematical sciences for engineering and natural science students at NTNU. We focus on long-term basic research and applied research at a high international level.

Our aim is to meet the society's needs for mathematical and statistical expertise in business and public administration as well as in the research and education sector. [The Department of Mathematical Sciences](#) is one of seven departments in the [Faculty of Information Technology and Electrical Engineering](#).

### Additional information

#### Place of service:

Trondheim 7491 Trondheim (Trondheim Municipality)