PhD fellowship in representation theory

About the position

A new PhD fellowship in representation theory (supervised by Aslak Bakke Buan or Øyvind Solberg) is available at the Department of Mathematical Sciences at NTNU starting in August 2020, or as soon as possible thereafter.

The position is part of the research project ‘Applications of reduction techniques and computations in representation theory (ARTaC), financed by the Research Council of Norway. The successful candidate will be offered a three-year position. The Department may offer a six to twelve-month extension as a teaching assistant. The workplace will be Trondheim, Norway. Students who have completed the first year of their master at NTNU, are welcome to apply to be accepted for an integrated PhD, see https://www.ntnu.no/ie/forskning/integrertphd

Duties of the position

The successful candidate should contribute towards the main objectives of the research project: Applications of reduction techniques and computations in representation theory (ARTaC). The project deals with homological, categorical and computational methods in representation theory, with emphasis on representations of finite dimensional algebras. Of particular interest are explorations of novel reduction techniques and computational techniques, and some specific applications related to generalizations of cluster combinatorics and classical homological conjectures.

The concrete research tasks for the PhD project related to this announcement will be adapted to the applicant. The PhD project will be conducted in the research group for Algebra at NTNU (campus Gløshaugen, Trondheim).

Required selection criteria

We are looking for a highly motivated candidate with a sound background in algebra and preferably a strong interest in both homological and computational methods. Good communication and collaboration skills and an independent, self-driven working style are essential.

The PhD-position's main objective is to qualify for work in research positions. The qualification requirement is that you have completed a master’s degree or second degree (equivalent to 120 credits) with a strong academic background in Algebra or equivalent education with a grade of B or better in terms of NTNU’s grading scale. If you do not have letter grades from previous studies, you must have an equally good academic foundation. If you are unable to meet these criteria you may be considered only if you can document that you are particularly suitable for education leading to a PhD degree.

The appointment is to be made in accordance with the regulations in force concerning State Employees and Civil Servants and national guidelines for appointment as PhD, post doctor and research assistant.

MSc students who expect to complete their master’s degree studies by summer 2020 are also encouraged to apply. Employment will then be postponed until the master’s degree is finished. MSc students at NTNU who complete the first year of their 2-year master program or their fourth year of their 5-year integrated master program, can apply for the position and will then be evaluated for an "integrated PhD" (https://www.ntnu.no/ie/forskning/integrertphd).

Personal characteristics

- High self-motivation
- Intrinsic curiosity and open-minded attitude
- Independent working style
- Very good communication skills

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

PhD candidates are remunerated in code 1017, and are normally remunerated at gross from NOK 479 600 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 (https://www.ntnu.edu/ie/research/phd) 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.

**About the application**

Please note that applications are only evaluated based on the information available on the application deadline. You should ensure that your application shows clearly how your skills and experience meet the criteria which are set out above.

The application must include:

- CV, certificates and diplomas
- Research plan or project proposal
- If available: Academic works - published or unpublished - that you would like to be considered in the assessment
- Name and address of three referees

Joint works will be considered. If it is difficult to identify your contribution to joint works, you must attach a brief description of your participation.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability.

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**

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background.

**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.

Information Act (Offentleglova), your name, age, position and municipality may be made public even if you have requested not to have your name entered on the list of applicants.

If you have any questions about the position, please contact Professor Aslak Bakke Buan, telephone +47 73 55 02 89, email aslak.buan@ntnu.no.

Please submit your application electronically via jobbnorge.no with your CV, diplomas and certificates. Applications submitted elsewhere will not be considered. Diploma Supplement is required to attach for European Master Diplomas outside Norway. Chinese applicants are required to provide confirmation of Master Diploma from China Credentials Verification (CHSI).

If you are invited for interview you must include certified copies of transcripts and reference letters. Please refer to the application number 2020/14061 when applying.

**Application deadline: 25.06.2020.**

**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.

Jobbnorge-ID: 187947, Søknadsfrist: 25. juni 2020