Associate Professor in Mathematics

Job description

The Department of Mathematics at the University of Oslo invites applications for a permanent Associate Professorship in Mathematics from mathematicians working in the area of Several Complex Variables/Complex dynamics or in the area of Quantum Information Theory.

The Department of Mathematics consists of six sections. For more information, please consult the Department's homepage. The Section for Several Complex Variables, Logic and Operator Algebras (Section 6) consists of three research groups: one in Several Complex Variables (SCV), one in Operator Algebras (OA), and one small group in Logic.

The hired candidate will be affiliated with Section 6 and do research either within the field of Several Complex Variables/Complex dynamics or within the field of Quantum Information Theory. The Section is seeking a dedicated and innovative researcher who meets the required qualifications for an associate professorship. The successful applicant must be able to teach at all levels and to supervise Master and PhD students. According to current regulations by the Department and the Faculty, 50% of the working time will be devoted to teaching, teaching related activities and administrative duties.

A rather broad label describing the research of the SCV-group at the moment is that of holomorphic mappings of several complex variables. This includes various kinds of embedding problems, the Andersen-Lempert theory of automorphisms / symplectomorphisms, and Oka-theory, with natural connections to convexity problems, the dbar-equation, geometry of pseudoconvex domains, and function algebras.

The group is also actively involved in the theory of complex dynamics (in one or several variables). The ideal candidate should work in the area between several complex variables and complex dynamics, and be interested in applications to algebraic geometry and theoretical physics. This would broaden the scientific profile of the group and open up for possible cross-fertilization within the Institute and the Faculty.

The OA-group is presently interested in quantum groups, semigroup C*-algebras, C*-algebras associated with categorical data, KMS-states, C*-dynamical systems and noncommutative harmonic analysis. Quantum Information Theory is a recent field which is intimately connected to Operator Algebras, Quantum Computing and Quantum Physics. The Department would like to develop its expertise in this new area.

The ideal candidate should be able to cooperate researchwise with the OA-group and to establish a stronger connection between the OA-group and the other groups at UiO involved with other aspects of Quantum Science. She/he should also be willing to take a leading role in the teaching of new courses in Quantum Computing and Quantum Information Theory.

Qualification requirements

Primary assessment criteria will be as follows:

- To qualify for an appointment as Associate Professor the applicant must have completed a PhD in mathematics and have a strong scientific track record within the area of Several Complex Variables/Complex dynamics or within the area of Quantum Information Theory.
- Scientific qualifications will play a major role, and the main emphasis will be put on the candidate's scientific production from the last five years.
- A research statement where the candidate puts focus on the scientific novelty of his/her work and presents a research plan, mentioning potential collaborations. This statement should be part of the application letter (see below). The scientific potential of the candidate, as shown by her/his publications as well as the research plan will be evaluated.
- Pedagogical qualifications and teaching experience will also be an important factor in the evaluation process and applicants selected by the screening committee (see below) will be asked to provide a teaching portfolio, where the applicant should describe her/his qualifications in view of the scholarship of teaching and learning (SoTL)-criteria:
  - Focus on the students' learning
  - A definite development over time
  - A research attitude to teaching and learning
  - A collegial attitude and practice
- Candidates should be able to establish, lead, conduct and collaborate in research projects. A track record in academic and administrative leadership is an advantage, as well as participation in the acquisition of research grants.
- International network, outreach activities, collegiality, and the ability to create a good working environment will also be part of the evaluation.
- Fluent oral and written communication skills in English. Fluent oral and written communication skills in a Scandinavian language is desirable.

Hiring process

The hiring process will make use of a screening committee. Applicants are therefore asked to send a short application (see details below). The screening committee will invite a limited number of applicants to send a more detailed application and provide additional documentation. The complete applications of the invited candidates will then be passed on to an expert committee which will evaluate the academic qualifications of the candidates and rank the candidates in a shortlist. Applications from the other applicants will also be passed on to the expert committee, who will decide if further candidates should be invited to send a more detailed application.
In the next step a selection committee will evaluate the personal skills of the short-listed candidates. The selection committee will also evaluate these candidates with regard to strategic priorities at the department and gender balance. They will also be invited for an interview and a trial lecture. For more details, see [Hiring process to academic positions at UiO](#).

**We offer**

- salary NOK 583 900 - 667 200 per annum depending on qualifications in position as Associate professor (position code 1011)
- a professionally stimulating working environment
- attractive welfare benefits and a generous pension agreement, in addition to Oslo’s family-friendly environment with its rich opportunities for culture and outdoor activities
- the opportunity to apply for promotion to full professorship at a later stage only pertains to employment as Associate Professor

**How to apply**

In the first place, only a short application is required, consisting of the following items:

- Application letter (max. 3 A4-pages, including a research statement summarising previous scientific work and research plans)
- CV (max. 10 A4 pages, summarising education, positions, pedagogical experience and qualifications, administrative experience, experience with acquisition of grants, and other qualifying activities)
- Complete list of publications (with links to PDF-files for all articles/preprints published/written during the last five years)
- Contact details of 2-3 reference persons (name, relation to candidate, e-mail and telephone number)

The application with attachments must be delivered in our electronic recruiting system. Please note that all documents should be in English (or a Scandinavian language).

The screening committee will invite a limited number of candidates (“short list”) to submit a portfolio of academic work (i.e. up to 10 publications) that are particularly relevant for the position. Academic texts shall therefore not be enclosed with the application.

**Formal regulations**

The successful candidate who at the time of appointment cannot [document basic teaching qualifications](#) will be required to obtain such qualifications within a two-year period.

The successful candidate must demonstrate mastery of both English and one of the Scandinavian languages as working languages. If an appointee is not fluent in a Scandinavian language, the appointee will be expected within a two-year period to learn sufficient Norwegian to be able to participate actively in all functions the position may involve.

Please see the [rules](#) for Appointments to Professorships and Associate Professorships and Rules for the assessment and weighting of pedagogical competence.

According to the Norwegian Freedom of Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

The University of Oslo has an [agreement](#) for all employees, aiming to secure rights to research results etc.

The University of Oslo aims to achieve a balanced gender composition in the workforce and to recruit people with ethnic minority backgrounds.

**Contact information**

For questions about the position please contact: Professor Erik Bédos (Head of Section 6), by phone: +47 22854426, or by e-mail.

For technical questions about the recruitment system please contact: HR-Officer Nina Holtan, by phone +47 228 54424, or by e-mail.

**About the University of Oslo**

The University of Oslo is Norway’s oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

Department of Mathematics is part of the Faculty of Mathematics and Natural Sciences. The Department is engaged in research covering a wide spectrum of subjects within mathematics, mechanics and statistics.

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