



# UiO : Universitetet i 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.

The Institute of Theoretical Astrophysics is part of the Faculty of Mathematics and Natural Sciences. It presently has 11 permanent professors/associate professors. The Institute employs some 15-20 postdoctoral and senior research fellows and has of order 15-20 Ph.D. students. The research activity of the Institute of Theoretical Astrophysics is concentrated around solar physics, cosmology and extragalactic astrophysics.



## Associate Professorship in Extragalactic Astrophysics

The Institute of Theoretical Astrophysics at the University of Oslo invites applications for an Associate Professorship in extragalactic astrophysics.

The faculty of the Institute of Theoretical Astrophysics presently consists of 13 associate and full professors, of these 11 are permanent professors/associate professors (to be increased to 13) and 2 are adjunct professors shared with other institutions. The Institute employs about 16 postdoctoral and advanced research fellows. The Institute has two sections, one for solar and stellar physics and one for cosmology and extragalactic astrophysics. The Section for solar and stellar physics will from November 2017 become the Norwegian Centre of Excellence "Rosseland Centre for Solar Physics".

Observational material is collected from space-borne and ground-based observatories. In interaction with and parallel to the observational activity, there is a strong activity in theoretical and computational astrophysics. The Institute is actively engaged in a large number of international collaborative programs. It is heavily engaged in organizational collaborations through the Norwegian membership in ESA, Norwegian participation in the Nordic Optical Telescope (NOT) and the Institute's participation in the Swedish 1-m Solar Telescope on La Palma, the balloon-borne CMB polarization experiment Spider and the CO Mapping Array Pathfinder experiment COMAP at Owens Valley, California. Space projects with major participation from the Institute include the Japanese Hinode satellite, the Interface Region Imaging Spectrograph (IRIS) and ESA's Solar Orbiter within solar physics and Planck and Euclid within cosmology and extragalactic astrophysics. A long-term effort for getting Norwegian membership in ESO is ongoing. In theoretical and computational astrophysics the Institute has built up strong groups within numerical modelling and within the use of modern computational statistics methods in data analysis. The groups have external funding through a number of grants from the European Union, the European Space Agency and the Research Council of Norway. The observational and theoretical activities at the Institute are supported by a modern computer infrastructure, including excellent access to supercomputing resources, both in-house, at the national level and internationally.

The teaching at the Institute is given as courses and as supervision within the framework given by the degrees bachelor, master and Ph.D. Presently the Institute has about 20 master's students and 15 Ph.D. students.

The research activity of the Institute has recently been broadened by starting a research group in extragalactic astrophysics. We wish to strengthen this group by opening a new permanent associate professorship.

### Information about the research group:

The position is affiliated with the extragalactic astrophysics research group within the Section for cosmology and extragalactic astrophysics. This group was started in 2013 and is led by associate professor Sijing Shen. It has presently a senior research fellow, a postdoctoral research fellow and three Ph.D. students in addition to Dr. Shen. Present activity includes theoretical and computational studies of formation and evolution of galaxies and the reionization of the intergalactic medium. The group interacts strongly with the cosmology group and also with the solar physics group, which has an internationally leading competence in radiative transfer and radiative hydrodynamics. The group utilizes strongly local, national and international High Performance Computing facilities, and also participates in science with ESA's Euclid mission. It is a high priority for the Institute to strengthen this group, and it will have priority to resources, postdoctoral research fellows and Ph.D. students.

### General information about the position:

Applicants must document scientific qualifications in his/her field, equivalent to an Associate professor position. The successful applicant must be able to teach at all levels and to supervise Master and PhD students. Up to 50% of the working time will be devoted to teaching (including supervision of students), teaching related activities and administrative tasks at the Institute and at the Faculty of Mathematics and Natural Sciences. Teaching is given in Norwegian and English. If an appointee is not fluent in a Scandinavian language, the appointee will be expected within a two - three year period to learn sufficient Norwegian to be able to participate actively in all functions the position may involve.

### Specific information about the position:

The position is meant to strengthen and/or broaden the new extragalactic astrophysics group. Candidates who can cooperate closely with and complement the present activities of the group are desired. This can be either through theoretical or modelling research, or also through observational research. Ability and preference for working in teams are highly valued qualities. Applicants are required to outline one or several research projects and show how these are expected to strengthen the scientific activities in the extragalactic astrophysics group and interact with the group leader's research activities.

**We offer:**

- Salary NOK 548 200 - 650 200 per annum, depending on qualifications and seniority.
- 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.

**How to apply:**

*The application must include:*

- Cover letter (statement of motivation, summarizing scientific work and research interest).
- CV (complete list of education, positions, pedagogical experience, administrative experience, project acquisition and coordination experience, and other qualifying activities).
- Up to 10 selected scientific publications the applicant wishes to include in the evaluation. The publications must have been published during the previous 5 years. This time limit can be extended for childbirths, documented sick leaves or other documented career breaks. For maternity, the time limit is extended by 18 months for each child born. For paternity, it is extended by the documented paternity leave actually taken for each child born.
- Complete list of publications.
- A portfolio containing documentation of teaching experience, capability of external fund raising and other qualifications the applicant wants to have considered.
- A research plan describing the applicant's scientific ambitions for the position.
- Ph.D. Diploma.
- List of reference persons: 2 - 3 references (name, relation to candidate, e-mail and phone number).

The application with attachments must be delivered in our electronic recruiting system, please follow the link "apply for this job". Please note that all documents should be in English (or a Scandinavian language).

In the evaluation of the scholarly production of the candidate, major weight is given to the production in the last five years. However childbirths will here be taken into consideration, so that the five year period is extended by eighteen months for each childbirth for women, and with the documented paternity leave actually taken for men.

In the evaluation of the qualified candidates the full range of the criteria will be explicitly addressed and assessed. Interviews will be part of the appointment process, along with a trial lecture.

**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.

As a general rule an interview and a trial lecture will be used in the appointment process. The basis for assessment will be the scholarly production of the applicant, other qualifications, pedagogical or educational, the applicant's qualifications within leadership and administration as well as the general personal suitability. In ranking the competent applicants, the full range of qualifications will be considered and explicitly assessed. Cf. the Rules for appointments to associate professorships. For more information see:

<https://www.uio.no/english/about/regulations/personnel/academic/rules-appointment-professor.html>

Rules for the assessment and weighting of pedagogical competence for appointments to permanent academic posts which include teaching duties:

<https://www.uio.no/english/about/regulations/personnel/academic/rules-assessment-weighting-pedagogical-competence.html>

According to the Norwegian Freedom and 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, see: <http://www.uio.no/english/for-employees/employment/work-results/agreement-rights-to-work-results.html>

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

The University of Oslo has a goal of recruiting more women in academic positions. Women are encouraged to apply.

**Contact persons:**

Head of Department Per Barth Lilje, phone: +47 22 85 65 17, e-mail: <mailto:p.b.lilje@astro.uio.no> or Associate Professor Sijing Shen, phone: +47 92 28 68 47, e-mail: [sijing.shen@astro.uio.no](mailto:sijing.shen@astro.uio.no).

For question regarding the recruitment system, please contact HR Officer Ørjan Pretorius, email: [orjan.pretorius@mn.uio.no](mailto:orjan.pretorius@mn.uio.no)

Jobbno: 143330, Deadline: Closed