UNIVERSITETET I OSLO

Jobbnorge ID: 182304
Deadline: 2/29/2020
Website: http://www.uio.no/
Scope: Fulltime
Duration: Fixed Term

PhD Research Fellows in Cosmology, two-three possitions

Job description

Two-three positions as PhD Research Fellow in cosmology are available at Institute of Theoretical Astrophysics.

No one can be appointed for more than one PhD Research Fellowship period at the University of Oslo.

The fellowship period is up to 4 years, with 3 years devoted to research education. The position entails a compulsory work load of 25% that may consist of teaching, supervision duties, and research assistance.

Starting date no later than 01.10.2020.

More about the position

Each position is associated with one specific research project, as summarized below. Candidates may apply to one, several or (preferably) all of these positions through a single application, and should rank the positions in order of their preference in the cover letter. All applications will be reviewed in a joint selection process, taking into account the stated preferences of each candidate. All projects require strong computational skills, and applicants are highly encouraged to submit a self-written computer code as part of their application material. Collaboration in large international collaborations is anticipated for all positions.

The available positions are dedicated to the following projects, listed in alphabetical order:

1) Cosmoglobe , supervised by Assoc. Prof. Ingunn Wehus (i.k.wehus@astro.uio.no)

Up to one position is associated with an ERC Consolidator grant called Cosmoglobe. The primary goal of Cosmoglobe is to develop a comprehensive astrophysical model of the microwave and sub-millimeter sky. This work will include analysis of multiple publicly available and proprietary data sets, including COMAP, DIRBE, FIRAS, Planck, PASIPHAE, SPIDER, WMAP and many others.

2) Time-domain Gibbs sampling , supervised by Prof. Hans Kristian Eriksen (h.k.k.eriksen@astro.uio.no)

Up to one position is supported by two EU-funded projects called BeyondPlanck and bits2cosmology. These projects aim to perform end-to-end analysis of current and future CMB experiments, including Planck LFI, SPIDER, WMAP and LiteBIRD, and develop the world's first end-to-end time-domain Gibbs sampler.

3) Unveiling the nature of gravity with galaxies, supervised by Prof. David F. Mota (d.f.mota@astro.uio.no)

One position is funded by the Research Council of Norway through the Researcher Project "Unveiling the Nature of Gravity at Galaxy Clusters Scales". The successful candidate will work on nonlinear structure formation within the framework of dark energy, dark matter and modified gravity theories. The work includes designing, performing and/or analysing simulations to confront with multi-wavelength observations of galaxies and clusters, and to investigate the degeneracies between small-scale baryonic physics and models of dark energy, dark matter and modified gravity.

Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition is to be among Europe's leading communities for research, education and innovation. Candidates for these fellowships will be selected in accordance with this, and expected to be in the upper segment of their class with respect to academic credentials.

- Master's degree or equivalent in astronomy, physics, informatics, statistics or a related topic
- Foreign completed degree (M.Sc.-level) corresponding to a minimum of four years in the Norwegian educational system
- Fluent oral and written communication skills in English. Please see English requirements for applicants from outside of EU/ EEA countries

Candidates without a Master's degree have until 30 June, 2020 to complete the final exam.

Grade requirements:

The norm is as follows:

- the average grade point for courses included in the Bachelor's degree must be C or better in the Norwegian educational system
- the average grade point for courses included in the Master's degree must be B or better in the Norwegian educational system

- the Master's thesis must have the grade B or better in the Norwegian educational system

The purpose of the fellowship is research training leading to the successful completion of a PhD degree.

The fellowship requires admission to the PhD programme at the Faculty of Mathematics and Natural Sciences. The application to the PhD programme must be submitted to the department no later than two months after taking up the position. For more information see:

http://www.uio.no/english/research/phd/

http://www.mn.uio.no/english/research/phd/

We offer

- Salary NOK 479 600 - 523 200 per annum depending on qualifications and seniority as PhD Research Fellow (position code 1017)
- Attractive welfare benefits and a generous pension agreement
- Vibrant international academic environment
- Career development programmes
- Oslo's family-friendly surroundings with their rich opportunities for culture and outdoor activities

How to apply

The application must include

- Cover letter - statement of motivation and research interests
- CV (summarizing education, positions and academic work - scientific publications)
- Copies of the original Bachelor and Master's degree diploma, transcripts of records and letters of recommendation
- Documentation of English proficiency
- List of publications and academic work that the applicant wishes to be considered by the evaluation committee
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)

The application with attachments must be delivered in our electronic recruiting system (please follow the link "Apply for this job"). Foreign applicants are advised to attach an explanation of their University's grading system. Please note that all documents should be in English or a Scandinavian language.

Applicants may be called in for an interview.

Formal regulations

Please see the guidelines and regulations for appointments to Research Fellowships at the University of Oslo.

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.

The University of Oslo seeks in particular to increase its number of female scientists, and women are particularly encouraged to apply."

Contact information

For further information please contact:

Project 1: Prof. Ingunn Kathrine Wehus, e-mail: i.k.wehus@astro.uio.no

Project 2: Prof. Hans Kristian Eriksen, e-mail: h.k.k.eriksen@astro.uio.no

Project 3: Prof. David Mota, e-mail: d.f.mota@astro.uio.no

For technical questions regarding the application system, please contact HR Adviser Elin Thoresen, +47 22 85 71 96, e-mail: elin.thoresen@mn.uio.no

About the University of Oslo

T**he 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 15 permanent professors/associate professors. The Institute employs about 15 postdoctoral and senior research fellows and has about 25 Ph.D. students. The research activity of the Institute of Theoretical Astrophysics is concentrated around solar physics, cosmology and extragalactic astrophysics.

Additional information

Place of service:

Universiteet i Oslo 0316 Oslo (Oslo Municipality)