

Jobbnorge ID: 220093
Deadline: 3/31/2022
Website: <http://www.ntnu.no>
Scope: Fulltime
Duration: Fixed Term

We are looking for a

Postdoctoral research fellow in computational astrophysics

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 42,000 students work to create knowledge for a better world.

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

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

About the position

We welcome applications for one postdoctoral research fellow position at the Department of Physics of the Norwegian University of Science and Technology (NTNU). We especially encourage women to apply for this position.

The selected candidate will join a growing and multifaceted research team funded by the [H2020 ERC Consolidator Grant LOVE-NEST](#) (PI: M. Linares). The main focus of the ERC team is the study of compact binary millisecond pulsars, which has an impact on a broad range of science topics (including super-massive neutron stars, nuclear physics, gravitational wave astronomy, cosmic rays, accretion flows and pulsar winds).

The position has a duration of two years, with a possible extension to a third year contingent on the performance of the selected candidate. Longer extensions might be possible if the researcher succeeds at securing independent funds/positions, through competitive national/international calls. The start date is mutually agreeable, and expected around June 2022.

The position is based in Trondheim: a vibrant multicultural city surrounded by beautiful landscapes and the third largest municipality in Norway (renowned as its technological capital). NTNU is the largest University in the country and provides excellent working conditions.

About the group

The Astrophysics and Particle Physics (APP) Group carries out research in high-energy astrophysics, astroparticle physics and multi-wavelength astronomy, as well as particle physics. Its current scientific interests include compact objects, cosmic ray production, transport and detection, astrophysical neutrinos, active galactic nuclei and quantum chromodynamics.

The APP Group is part of the Department of Physics, which currently employs about 160 people. On average some 2000 NTNU students follow courses at the Department of Physics every year.

Duties of the position

The postdoctoral research fellow will work on topics related to compact binary millisecond pulsars (aka "spiders") within the LOVE-NEST team. She or he is expected to carry out an independent research program, and to contribute to the development of physical models of spiders and related systems.

Required selection criteria

- You must have completed a Norwegian doctoral degree or corresponding foreign doctoral degree recognized as equivalent to a Norwegian PhD in Astronomy or Astrophysics (by the start date of the position)
- Published experience in astrophysical modelling and/or numerical simulations
- A strong publication record in high-impact journals
- Fluent English communication, written and oral

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](#)

Preferred selection criteria

- Demonstrated experience in student supervision (at the MSc and/or PhD level)
- Research experience in binary systems and compact objects
- Development of computer codes for astrophysics

Personal characteristics

- Social and collaborative skills (ability to work in a team and contribute to its success)
- Enthusiasm for science
- Independent
- Systematic

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](#)
- Access to telescope time through dedicated ERC funds and the Nordic Optical Telescope
- Ample budget for travel, computing equipment and other research expenses
- Access to the computer cluster at the Department of Physics
- Possibility to officially co-supervise PhD theses

Salary and conditions

As a Postdoctoral Fellow (code 1352) you are normally paid from gross NOK 553 500 per annum before tax. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.

The position has a duration of two years, with a possible extension to a third year contingent on the performance of the selected candidate.

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.

The position is subject to external funding.

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

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 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.

If, for any reason, you have taken a career break or have had an atypical career and wish to disclose this in your application, the selection committee will take this into account, recognizing that the quantity of your research may be reduced as a result.

The application must include:

- Cover letter (summarize your background and motivation to apply; max. 1p)
- CV (max. 4p; and the most important certificates/diplomas, with English translation when necessary)
- List of publications (briefly describe your contribution in the case of large collaborations; max. 4p)
- Two reference letters sent directly by the academic references to manuel.linares@ntnu.no. Also, list their names, position and contact details in the application

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. Description of the documentation required can be found [here](#). If you already have a statement from NOKUT, please attach this as well.

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 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](#)

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 Prof. Manuel Linares, email:manuel.linares@ntnu.no

If you have any questions about the recruitment process, please contactMagnus Gautvik, email:magnus.gautvik@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 NV/41 when applying.

Application deadline: 31.03.22

NTNU

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 Physics

Our research and teaching are both experimental and theoretical, covering a wide range of disciplines. Our activities contribute to development of new medical technology and to finding solutions for the next generation's communication technology, energy utilization and development of materials. [The Department of Physics](#) is one of eight departments in the [Faculty of Natural Sciences](#).

Additional information

Place of service:

Høgskoleringen 1 7491 Trondheim (Trondheim Municipality)