

PhD positions in numerical astrophysics and spectral modelling at EPFL
(<https://jobregister.aas.org/ad/7a6b0680>)

Category: Pre-doctoral/Graduate Positions
Institution Classification/Type: Research Laboratory
Institution: EPFL
Department name: LASTRO
City: Lausanne
State: Vaud
Zip: 1015
Country: Switzerland

Job Announcement:

The École polytechnique fédérale de Lausanne (EPFL) and the Laboratory for Astrophysics (LASTRO) invite applications for one or two PhD positions in computational astrophysics, galaxy evolution and/or spectral modelling. EPFL offers a unique, active and diverse research environment and has been repeatedly highly ranked at international university evaluations (e.g. 14th in QS World University Rankings).

Project description:

The successful candidate(s) will join the newly established and dynamic research group of theoretical/computational astrophysics, led by Assistant Prof. Michaela Hirschmann at LASTRO. We are looking for talented and highly motivated students, interested in galaxy evolution, in performing and analysing numerical simulations, and in closely linking them to spectroscopic observations via novel spectral evolution models. The goal is to gain a detailed understanding of how the first galaxies and first supermassive black holes formed and co-evolved in our Universe, and to build a novel interpretative framework for the revolutionary observational spectroscopic surveys expected to be conducted in the near and far future with facilities such as JWST/NIRSpec, Euclid and ELT/Mosaic. The position, which also involves teaching duties at Bachelor or Master level, becomes available on April 1st, 2022, but a later start is also possible.

The selected PhD student(s) will need to enrol in the Physics program of the EPFL doctoral school, and the employment runs up to a total of four years. Doctoral school information and employment conditions at EPFL may be consulted online [[here](#) and [here](#)]. Applicants are expected to hold a Master degree (or equivalent) in (astro)physics by the start of employment. The ideal candidate has a strong motivation for computational, basic astrophysical research, and has received education in (extragalactic) astrophysics. Experience with data analysis, computer programming and/or hydrodynamic simulations is of advantage. English language proficiency (written and spoken) is further necessary.

EPFL and LASTRO are committed to excellence through diversity and wish to establish a climate that welcomes, celebrates, and promotes respect for the contributions of all students and employees. All qualified applicants will receive consideration for employment without regard to background, gender identity, national origin, etc.

How to apply:

The application should comprise:

- Motivation letter (1 page max)
- Curriculum vitae
- Contact information of at least two referees willing to write a reference letter
- Summary of research experience (1 page max)

All documents should be concatenated in the order listed above in one single pdf file.

Applicants should also arrange for 2 letters of references. All application materials, including the letters, need to be sent to **PhD.EPFL.21@gmail.com** by December 15th, 2021.

Application deadline: 15.12.2021