

## PhD Advert

The École polytechnique fédérale de Lausanne (EPFL) and the Laboratory for Astrophysics (LASTRO) invite applications for one PhD and one Postdoctoral positions. The successful candidates will join the Next-Generation Radio Astronomy group led by Dr. Emma Tolley, which works on high-performance computing, data science, astrophysics, and fundamental research in the context of the Square Kilometre Array (SKA) project.

**Project description:** We are looking for talented students and young researchers to work on high-impact astrophysics research using the world-leading MeerKAT array, while developing and incorporating novel machine learning techniques to improve the efficiency of the technical aspects of radio data reduction and analysis. The science focus of our synergistic approach is on the environment of galaxy clusters, a key science area for the SKA.

The candidates should have a strong motivation for observational astrophysics and data analysis. They should have received education in astrophysics and cosmology. Full working proficiency of the English language is required.

**For the PhD fellowship,** the student will need to enrol in the Physics program of the EPFL doctoral school. The employment extends to a total of 4 years, assuming a successful evaluation after the first year of PhD. Applicants are expected to hold a Master degree (or equivalent) in (astro) physics by the start of employment

**Working environment:** EPFL is recognized as one of the best Universities in Europe and covers both engineering and fundamental sciences. Astrophysicists at EPFL are involved in a wide number of large-scale surveys, and EPFL is a member of the SKA Observatory. The spatial proximity at the Observatoire de Sauverny to astrophysicists from the University of Geneva allows for fruitful and scientifically stimulating interactions.

**Starting date and benefits:** The start date is anticipated to be in the Autumn 2023, although different dates can be discussed. Salary levels depend on qualification and come with extensive social benefits, allowing for a high standard of living in Switzerland. Equal opportunities and diversity are an integral part of personnel and organisational development at EPFL and LASTRO.

**How to apply:** The application should comprise:

- A motivation letter (1 page max),
- A curriculum vitae (incl. publications, and all grades/certificates after high school)
- A summary of research experience (3 pages max).

All documents should be concatenated in one single pdf file and sent to [emma.tolley@epfl.ch](mailto:emma.tolley@epfl.ch) no later than July 30, 2023, stating "RadioClusters" and the name of the applicant in the subject line.

Applicants should also arrange for 2 letters of references, which have to be sent by the referees to [emma.tolley@epfl.ch](mailto:emma.tolley@epfl.ch) by July 30, 2023 as well.