

## **Postdoctoral position on Cosmology and Artificial Intelligence**

### **Job Summary**

Category: Post-doctoral Positions and Fellowships

Institution: Universität Hamburg

Number of Positions Available: 1

Duration: 3 Years

Work Arrangement: In-Person

Location: Hamburg, Germany

Deadline: 1st December, 2024

### **Job Description**

We seek to appoint a three-year postdoctoral researcher to conduct original research in the areas of cosmology and artificial intelligence, with focus on large-scale structure. The successful applicant will be part of the newly formed research group led by Professor Luisa Lucie-Smith at the University of Hamburg, Germany. The successful applicant will conduct original research to advance machine learning approaches in cosmological research, broadly related to topics such as modelling of the large-scale structure, the galaxy-halo connection and testing open questions in fundamental physics.

Candidates with existing expertise in computational modelling, numerical simulations, developing and applying novel statistical and machine learning techniques will be highly valued; an understanding or experience in the area of explainable artificial intelligence will also be advantageous. German language skills are not required.

The University values and actively supports equality, diversity and inclusion and strongly welcomes applications from women and underrepresented minorities.

The successful applicant will be based on the Hamburg Observatory campus situated south of the city of Hamburg. Scientists at Hamburg Observatory cover a wide range of research areas of modern astrophysics, such as extragalactic astronomy, cosmology, galaxy formation, gravitational waves and statistical analysis including artificial intelligence. Our 9 individual research groups provide a diverse and stimulating research environment. Furthermore, the successful candidate will be able to benefit from the Observatory's close ties with other research institutes in Hamburg, including DESY and the Cluster of Excellence "Quantum Universe". Generous computing resources as well as travel funding will be available to the successful candidate.

The term of employment is for three years, with an anticipated starting date in 2025.

### **Application Instructions**

Interested candidates are invited to apply via email to [luisals@mpa-garching.mpg.de](mailto:luisals@mpa-garching.mpg.de). Candidates should send (1) a curriculum vitae, including names and email addresses of two or three references; (2) publication list; (3) cover letter; and (4) a research statement (3xA4 pages max, 11pt font) by December 1, 2024. Also arrange for at least two letters of recommendation to be submitted via email by December 1, 2024. Late applications will be accepted until the post is filled.

### **Compensation**

EUR. 50,000 — EUR. 65,000

This position is a research position at the German TVL E13 salary scale (income depending on post-doctoral experience).

**Included benefits**

Health care, 30 days vacation per year, parental leave benefits, pension contributions as for all German TVL public service positions.

**Inquiries:** please contact [luisals@mpa-garching.mpg.de](mailto:luisals@mpa-garching.mpg.de).