



UNIVERSITY
OF COLOGNE



Photo: Thomas Jusek

Postdoctoral position (f/m/x)

Institute for Astrophysics

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

A postdoctoral position is available in the Institute for Astrophysics at the University of Cologne in the field of star formation research in the Excellence Cluster Dynaverse project ARC 1.2c.

YOUR TASKS

- » Leading the study of the flow of material in the regions where high mass stars are forming
- » Identifying a sample of potential streamers in the ALMAGAL sample of sources
- » Establishing a post-processing framework for existing MHD simulations to simulate dust continuum emission, including polarization, and molecular line emission
- » Developing an ML system trained on these synthetic observations to constrain the orientation and structure of streamers identified in observations
- » Coordinating with other projects in the Dynaverse Excellence Cluster project

YOUR PROFILE

- » Applicants are required to have a doctoral degree in astrophysics or a related field
- » Experience within the analysis of numerical simulations and their post-processing to generate synthetic observations
- » Experience within the interpretation of molecular line observations
- » Excellent communication and interpersonal skills in an international and diverse environment
- » Familiarity with modern data analysis and machine learning methods

WE OFFER

- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Flexible working time models, full-time positions suitable for job sharing
- » Opportunity to work remotely

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 1 April 2026 on a full-time basis (39,83 hours per week). It is limited for a fixed term of three years. If the applicant meets the relevant wage requirements and has the appropriate personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications (letter of motivation, CV, list of publications, copies of certificates) without a photo under: <https://jobportal.uni-koeln.de>. The reference number is Wiss2601-12. The application deadline is 3 April 2026.

For further inquiries, please contact Professor Dr. Gary Fuller (gfuller@uni-koeln.de) and take a look at our [FAQs](#).



HR EXCELLENCE IN RESEARCH