UNIVERSITY OF COLOGNE

Faculty of Mathematics and Natural Sciences

Foto: Simon Wegener

Postdoc in the Cluster of Excellence Dynaverse (f/m/x)

Astrophysics Institute

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.

In the frame work of the Cluster of Excellence Our Dynamic Universe (DYNAVERSE) we are looking for a PostDoc (f/m/x) for the development of detectors and detector architecture for spectroscopic second-generation multi-pixel instruments for the CCAT-observatory.

YOUR TASKS

- Project management of the detector development for second- generation instrumentation for the CCAT/FYST observatory (https://ccat.uni-koeln.de/)
- Co-responsibility for the system design and system analysis of analysis of microwave kinetic inductance detector microchips and superconductor-insulator-superconductor mixers for a spatially multiplexing wide-band spectrometer for CCAT/FYST
- Close cooperation with the in-house microfabrication laboratory where the devices are developed and our partner laboratory at TUDelft/SRON
- Close cooperation with the in-house receiver group that designs and builds the telescope receivers
- Contribution to the management of the detector research lab
- Co-supervision of (presently 5) postdoctoral students and master student labcourses

YOUR PROFILE

- PhD in Physics, in the field of experimental physics with experience in superconductivity, microwaves, cryogenics and/or micro-/nanofabrication
- Knowledge about and interest in detector physics
- Proven design capabilities
- Understanding of the key pecularities of microchip fabrication and ideally experience working closely with a microfabrication lab
- Team player and independent thinker with leadership skills
- Experience with the supervision of BSc, MSc and possibly doctoral students

WE OFFER

- An international team in the dynamic field of astronomical instrumentation
- A diverse working environment with equal opportunities
- Support in balancing work and family life
- Flexible working time models
- Extensive advanced training opportunities
- Occupational health management offers
- 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 August 2026 on a full-time basis (39,83 hours per week). The position is to be filled for a fixed term until 31 July 2029. If the applicant meets the relevant wage requirements and 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 (without a photo) under https://jobportal.uni-koeln.de
The reference number is Wiss2604-03. The application deadline is 31 May 2026.

For further inquiries, please contact Professor Dominik Riechers at (riechers@ph1.uni-koeln.de) or Dr Netty Honingh (honingh@ph1.uni-koeln.de) and take a look at our FAQs.

HR EXCELLENCE IN RESEARCH