

Faculty of Mathematics and Natural Sciences

PhD position in Computational Astrophysics

I. Physics Institute

With approximately 50,000 students, the University of Cologne is one of the largest universities in Germany and ranks among the Excellence Universities. It employs over 600 professors and 7,000 academic and non-academic staff.

The Theoretical Astrophysics group aims at bridging the gap between local studies of star formation and feedback and the galaxy-scale evolution of the interstellar medium (ISM). This is done utilizing 3D high-resolution simulations, which require high-performance computing. The position is offered within the ERC-St.G Project RADFEEDBACK of Prof. Walch.

YOUR TASKS

- » Carry out large-scale, massively parallel radiation-magnetohydrodynamics simulations.
- » Analyze and publish the results
- » Develop and improve numerical techniques
- » Work with fellow students and postdocs in an international team

YOUR PROFILE

- » University diploma or MSc. degree in physics, astrophysics, or a related field
- » Experience in high-performance computing and astrophysical fluid dynamics is welcome
- » Knowledge and first experience with programming in Fortran90 / C++ and possibly MPI
- » Knowledge of python or other plotting tools

WE OFFER YOU

- » to carry out your PhD on a hot topic in a highly international environment
- » A diverse and fair working environment
- » Support in reconciling work and family life
- » Flexible working time models, full-time positions suitable for job sharing
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Local transport ticket at a discount for UoC employees

The position is available from 01.04.2019 on a part-time basis (50%). It is limited to 3 years. 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.

The University of Cologne promotes equal opportunities and diversity in its employment relations. Women are expressly encouraged to apply and given priority in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We expressly welcome applications from individuals with severe disabilities or people of equivalent status. Severely disabled applicants of equal merit and qualifications will be given priority.

Please send your convincing application with proof of the sought qualifications by email (in one pdf-file) with the reference number 1812-05 to walch@ph1.uni-koeln.de. The application deadline is January 30, 2019.