



## Research Assistant in Debris Discs (PreDoc)

We invite applications for a 3-year doctoral position in the area of Debris Discs at the Department of Astrophysics of the University of Vienna, Austria. The Department of Astrophysics with currently around 90 members is part of the Faculty of Earth Sciences, Geography and Astronomy at the University of Vienna.

Starting no earlier than 01<sup>st</sup> May 2023, the successful candidate will join Prof. Manuel Güdel's research group on Star and Planet Formation, and work on the FFG-funded project "Exciting and Excited Debris Discs" with project leader Dr. Nicole Pawellek.

Preferred starting date: 01<sup>st</sup> May 2024

Funding: 75% position (30h/week) for 3 years

**Application deadline: 01<sup>st</sup> March 2024**

### Project outline:

The project focuses on debris discs, the leftovers from planet formation processes around stars. The successful candidate is going to investigate the dynamical processes altering the orbits of asteroids around other stars. The applicant will generate detailed physical models, including collisions and other mechanisms like stellar radiation, to describe debris disc properties at multiple wavelengths. This project is based on the newest data coming from space observatories such as the James Webb Space Telescope together with ground-based telescopes like the Atacama Large Millimeter/submillimeter Array (ALMA). The data will be compared with our models. Among other things, the applicant will investigate the properties of asteroids and in particular try to answer the question whether planets are hidden in debris disc systems forming analogues to our Solar System.

### Your future tasks:

- Research on extrasolar planetary systems with main topic on debris discs
- You work on your dissertation and its completion.
- You take on tasks in research and teaching.
- You become an active PhD student member of the "Vienna International School of Earth and Space Sciences".

### Requirements:

- Completed master's degree (or equivalent) in the field of physics or astrophysics
- Basic knowledge in astrophysics
- Excellent command of written and spoken English
- Basic experience in academic writing
- IT user skills: Experience in C++ programming is beneficial
- Didactic competences are beneficial



- Knowledge in planet formation and evolution is beneficial

**The university offers:**

- 75% employment (30h/week)
- Salary: Job grading in accordance with collective bargaining agreement: §49 (3) lit. a (B1, predoc)  
<https://personalwesen.univie.ac.at/jobs-recruiting/gehaltsschema/>
- We offer an excellent and interdisciplinary environment
- Flexible working hours including remote/hybrid up to a certain extent
- Many opportunities for advanced learning/training
- Family-friendly working environment

By 01<sup>st</sup> March 2024, please, send the following documents to [nicole.pawellek@univie.ac.at](mailto:nicole.pawellek@univie.ac.at):

- Cover letter (max. 1 page, A4)
- CV
- Bachelor's and Master's Diploma (including grades for each subject)