



FRIEDRICH-SCHILLER-  
UNIVERSITÄT  
JENA



## PhD student position on debris disks

The Astrophysical Institute and University Observatory (AIU) of the Friedrich Schiller University, Jena, Germany, invite applications for a graduate student position.

The position is to work in the Research Unit FOR 2285 “Debris Disks in Planetary Systems”, funded by the German Research Foundation (DFG). The successful candidate will join the theory group at the AIU and will work for the Research Unit’s project P2 “**Sculpturing of debris disks by planets and companions.**” The project aims at understanding the origin of the observed features in debris disks, such as sharp edges, eccentric offsets, or azimuthal asymmetries. Many of these can be attributed to the gravitational influence of alleged but yet unseen planets and companions. The graduate student is expected to utilize a model devised earlier in our group to investigate the disk evolution under the action of secular gravitational perturbations combined with a full collisional cascade and drag forces. The model should be applied to infer possible dynamical histories of the systems, to explore how the parameter variation affects the predicted structure, and to test the predictions against the structure actually observed in selected disks. The researcher will benefit from close collaboration with other observational, theory, and laboratory projects of the Research Unit.

The position is for three years and can start at any time in the summer or fall 2019. The salary is standard for doctoral positions in Germany (1/2 TV-L E13 of the German federal public service scale) and includes a number of social and family-related benefits. Travel funding for short-term visits to collaborators or to attend conferences will be provided. Funding is available for computational resources and the group already has a set of 8 multi-core servers for running simulations. Reimbursement of relocation costs is possible.

The applicant should have a strong educational record and hold a Masters’ degree or equivalent in physics or astronomy. Previous experience with numerical simulations and astronomical research, preferably with debris disks and/or orbital dynamics, would be a strong advantage. Proficiency in English is required.

Applications as a single PDF document should include a CV, a brief statement of research interests (1 page max), and the names and contact details of two referees. Please quote “FOR2285/P2” in the subject. All applications received by **June 17, 2019** will be given full consideration.

The Friedrich Schiller University is an equal opportunity employer and explicitly encourages women to apply. Disabled persons with equal aptitude, competence and qualification will be given preference.

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