

Job ID: IWF086PD224

The Space Research Institute ([IWF](#)) with about 100 employees from twenty nations, is one of the largest institutes of the Austrian Academy of Sciences ([OeAW](#)). The institute is located in the Victor Franz Hess Research Center of the OeAW in the south of Graz and hosts [eight research groups](#) on the astrophysics of the solar system, exoplanets, and space instrumentation. The IWF also operates a world-leading satellite laser ranging station at the Lustbühel Observatory. The Space Research Institute in Graz invites applications for a

POSTDOC POSITION (F/M/X)

Characterization of systematic uncertainties in stellar evolution modelling in the context of the ESA PLATO mission (full-time, 40h per week)

The successful candidate will be part of Dr. Luca Fossati's research group "Exoplanet characterization and evolution". The group's research work concentrates on the observation, characterization, and modelling of exoplanets, focusing in particular on the study of atmospheric structure and evolution using both observations and theory. Furthermore, the group holds significant expertise in the analysis of transit light curves and of radial velocity time series, as well as in the determination of stellar parameters from evolutionary models. The group is heavily involved in a number of current and future space missions (e.g. CHEOPS, CUTE, PLATO, ARIEL, ESCAPE, HWO) and in large collaborations exploiting ground-based high-resolution spectrographs to carry out both exoplanetary and stellar science. The position is funded through a grant of the Austrian Research Promotion Agency as part of the Austrian Space Applications Programme.

Your tasks:

- Characterization of systematic uncertainties involved in stellar evolution modelling
- Development of a (web) tool enabling one to estimate systematic uncertainties on stellar mass and age, focusing in particular on the region of the Hertzsprung-Russell diagram of interest to the PLATO mission
- Publication of original research work on refereed journals

Your profile:

- PhD in the relevant fields of astrophysics
- Experience with stellar evolution modelling. In particular, experience with the MESA stellar evolution code and the computation of grids of stellar evolutionary models will be considered as an asset
- Familiarity with the development of online web and/or open source tools
- Experience in scientific programming and publishing

The appointment begins as early as January 01st, 2025 and will be for 2 years. A later starting date is also possible. We offer an annual gross salary of € 66.501,40, susceptible to increase depending on inflation, according to the collective agreement of the Austrian Academy of Sciences. Included are various social benefits.

Applications must include a cover letter in addition to (1) curriculum vitae, (2) list of publications, (3) statement of the applicant's research experience (max 2 pages), (4) certificates for academic record, and (5) the name and email address of two persons willing to send letters of recommendation. Please send the application (mentioning Job ID: IWF086PD224) in one PDF file to luca.fossati@oeaw.ac.at by **August 31st, 2024**. Inquiries about the position should be directed to Dr. Luca Fossati.

The Austrian Academy of Science (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.