# Postdoctoral Researcher on Gaia data analysis at the Max Planck Institute for Astronomy in Heidelberg

The Max Planck Institute for Astronomy is seeking a researcher to analyse data from the Gaia mission, a flagship European Space Agency project to map billions of objects in the universe. The successful applicant will join the international Gaia Data Processing and Analysis Consortium (DPAC), where they will become responsible for classifying objects using machine learning methods, based on photometry, astrometry, and low resolution spectroscopy.

**The work will involve**
* maintaining and extending existing algorithms and software
* improving classification models and implementing new functionality
* analysing and interpreting results
* contributing to the production of the Gaia catalogues and other data products
* exploiting results and writing scientific articles.
This is a full-time position, but there could be up to 20% time available for collaborating within the institute on related projects.

The MPIA is home to over 200 scientists and engineers from many countries working on exoplanet atmospheres, planet and star formation, and galaxies and cosmology. Staff are involved in various large-scale observational, theoretical, and instrumentation projects, including for example 4MOST and SDSS-V. The MPIA is a partner in the LSST Corporation and will have access to the Rubin/LSST data products.

**We seek candidates with** a PhD in astronomy, physics, or a related subject (with some astronomy experience), who have strong skills in both programming and machine learning. The DPAC software is written in Java, which candidates should either know or be willing to learn rapidly. Experience working with large (astronomical) data sets is a plus. The candidate will work closely with other people in the MPIA Gaia Group and in the DPAC, so good team-working skills are important.

**Candidates should provide** a cover letter, CV, publication list, and a two-page statement of their relevant research and software development experience, concatenated in this order into a single pdf file. Please arrange for three letters of reference to be submitted through the application portal. Candidates may also provide an optional link to their own public software repository. All applications and reference letters must be submitted using the following application portal by 24 May 2021:
https://lotus1.gwdg.de/mpg/mhas/mpia_gaia_postdoc_323.nsf/portal

We anticipate a starting date of 1 January 2022. The position is funded by the German Space Agency (DLR) for three years. It may be extended depending on performance and continued funding. For further information, contact the head of the Gaia Group at MPIA, Dr. Coryn Bailer-Jones (calj@mpia.de).

**Benefits:** Remuneration will be on the German public sector scale (TVöd level E14), and depends on qualification and experience. Social benefits are granted according to the regulations for public service.

The Max Planck Society is an equal opportunity employer.  Applications from women, disabled people, minorities, and groups historically under-represented in astronomy are particularly welcome. For questions concerning equal opportunities contact Thavisha Dharmawardena (dharmawardena@mpia.de), and for questions concerning disabilities contact Ralf Launhardt (rl@mpia.de). They will keep any communications confidential.

The MPIA supports its employees in their search for suitable childcare.