



The Leibniz Institute for Astrophysics Potsdam (AIP) invites applications for a

PhD Studentship in Galactic Astronomy (m/f/d)

The position is an ERC-funded PhD position in the newly founded group "Milky Way Accretion History" which is part of the Dwarf Galaxies and the Galactic Halo section.

Research in this section is largely based on studying the merging history of the Milky Way through stellar populations using astrometric, photometric and spectroscopic surveys as well as developing algorithms for numerically modelling dynamical processes acting in the Galaxy and performing large computer simulations. Such numerical experiments focus on understanding the formation history of the Milky Way in a cosmological context through computational galaxy formation simulations, detailed N-body experiments to probe the fine-grained phase-space structure and dynamics of the Galaxy (dark matter halo, stellar halo, disc and bulge), including interpretation of large datasets from current and future Galactic Archeology surveys.

The main goal of the PhD is to study the early accretion history phase of the Milky Way through numerical simulations and interpretation of data from large surveys in Galactic Archeology with Dr. Chervin Laporte. Funding is provided by the European Research Council (ERC) through the VIA LACTEA Starting Grant project "Numerical Simulations of the Milky Way's Accretion History".

The position begins in September 2020 and includes support for travel, computing and access to HPC supercomputers. The applicant is expected to have or shortly receive a Masters degree in Physics, Mathematics, Astrophysics or Astronomy. The initial appointment will be made for 2 years, with a possible extension of up to 4 years, depending on performance and availability of funds. Desired skills include training in physics or astrophysics, strong mathematical background and experience in numerical calculations. Proficiency in English is mandatory. A knowledge of coding in Python and/or C/C++ would be desirable. Genuine interest or some experience in cosmology and/or Galactic astronomy research will be highly beneficial. Experience on using high performance computing for executing and analysing cosmological simulations of galaxy formation or N-body simulations would be advantageous but not a pre-requisite.

The salary is based on the German public service scale (TV-L 13). The AIP is an equal opportunity employer, values diversity and particularly encourages applications from women and minorities. The AIP is located in the beautiful Potsdam/Babelsberg area, at the South-western border of the Berlin metropolitan area. About 130 scientists work on a variety of astrophysical topics covering the full range from solar physics to cosmology. Potsdam is also the home of the Max Planck Institute for Gravitational Physics, the Institute for Physics & Astronomy of Potsdam University and several other research institutions.

To apply, please send a single PDF file containing a curriculum vitae, transcripts, a motivation letter including statements on education, skills and experience. If applicable please attach separately the copies of Bachelor and/or Master Thesis. Applicants should also arrange for two letters of recommendation to arrive by the deadline. Application material should be sent to Dr. Chervin Laporte via e-mail to bewerbung_2019-25@aip.de by 31st December. Review of applications will begin on 1st January 2020, and continue until the position is filled.

For enquiries contact: Dr. Chervin Laporte, Leibniz Institute for Astrophysics Potsdam (AIP), An der Sternwarte 16, 14482 Potsdam, Germany, email: claporte@aip.de