



Postdoctoral Position in Advanced Data Analysis and HETDEX Science Exploitation 06/18

Applications are invited for a postdoctoral position in the field of high redshift spectroscopic surveys of the Max-Planck-Institute for Extraterrestrial Physics (MPE) in Garching. We are searching for an astrophysicist with experience in processing of large astronomical datasets and software development.

The candidate is expected to work with us on the exploitation of the Hobby-Eberly Dark Energy Experiment (HETDEX), in which we are a major partner. HETDEX is a unique spectroscopic survey that will map the evolution of Dark Energy using Lyman-alpha emitting galaxies in the high redshift universe ($z = 1.9 - 3.5$). The survey instrument, VIRUS, consists of 75 IFUs distributed across the 22-arcmin field of the upgraded 9.2-m HET. Each exposure gathers 33,600 spectra. The instrument is currently undergoing late phases of commissioning and early survey operations have started in 2017.

The candidate should have a strong interest in cosmological or galaxy surveys and is expected to spend about equal amounts of time on the data analysis and related software development and on the science exploitation of HETDEX. Proven experience in one modern programming language is a requirement for this position. Proficiency in C++ and Python and previous experience with spectroscopic data and the management of large astronomical datasets are strong assets.

The applicant will have access to the HET telescope through the MPE partnership, the unique data product of HETDEX itself and other facilities available to us (e.g. ESO telescopes).

Starting date is July 2018 (flexible) **for 3 years guaranteed** with the possibility of extension up to five years. Salary and social benefits are based on the German TVOeD scale, depending on experience.

Applicants should submit their documents (in PDF format) at <https://recruitingapp-5257.de.umantis.com/Vacancies/311/Application/New/31?lang=eng> by **April 30, 2018**, including a cover letter, a curriculum vitae, a publication list, and a statement of research and software experience and interest. Please also supply a list of three references.

Informal enquiries about the position may be addressed to Dr. Maximilian Fabricius (mxhf@mpe.mpg.de). For further details about MPE see <http://www.mpe.mpg.de>.

Later applications may also be considered in case the post is not filled until May 2018.

The Max-Planck Society is an equal opportunity employer and women and minorities are encouraged to apply.

