



The Institute for Astronomy and Astrophysics (IAAT) of the Kepler Center for Astro and Particle Physics at the University of Tuebingen, Germany, invites applications for a

PhD position (m/f/d, 66% E13 TV-L)

The position is expected to be filled from the 1st of June 2025 and the appointment will be for **3 years**. The position is a “**wissenschaftliche Mitarbeiterstelle**”, remuneration is in accordance with pay grade E13 (66%) of the German public-sector collective agreement TV-L.

The candidate’s tasks include various aspects of **hardware and software development** within the **i-RASE project** (developing AI-based methods for detector readout and data pre-processing on board of satellite observatories), which is carried out by the institute's High Energy Astrophysics section. As part of the project, an active participation in the development team of the working group is expected, taking part in test campaigns, documentation of the results achieved and their presentation at international project meetings.

We require a **solid interest in digital electronics development**, experience in C and python programming and familiarity with Linux environments. Knowledge of FPGA-related workflows and familiarity with hardware description languages such as VHDL, as well as experience with FPGA development environments like those from Xilinx or Microchip, would be an asset. In addition, an interest in **machine learning** would also be considered a plus, especially if it can be connected to embedded or hardware-oriented applications. Applicants are required to have a diploma, master or equivalent university degree in physics or astronomy at the beginning of the contract.

The High Energy Astrophysics Group of IAAT has a wide range of interests, including experimental developments in X-ray and TeV Astronomy. Main projects include eROSITA, ATHENA, H.E.S.S., CTAO, eXTP, THESEUS, HERMES and GIFTS. We conduct data analysis and modelling of multi-wavelength observations of galactic compact sources, of supernova remnants, and for indirect dark matter search.

The University of Tübingen is committed to equal opportunity and diversity. Applications from equally qualified candidates with disabilities will be given preference. We invite qualified women to apply.

Applications should be sent not later than the 21st of April 2025 as one single pdf file, including a full *curriculum vitae*, short cover letter, scan of university degree, and the names and email addresses of at least two references, via e-mail, to the head of the High Energy Astrophysics section: Prof. Andrea Santangelo, andrea.santangelo@uni-tuebingen.de.

The responsibility for the employment lies with the administration of the University of Tübingen.

For further information: Dr. Chris Tenzer, +49 7071 29-75473, tenzer@astro.uni-tuebingen.de