

CSC-Tübingen PhD Scholarship Program

2024 application round: prospective PhD positions at the University of Tübingen

Faculty: Science

Institute / Section / Subject: Institute of Astronomy and Astrophysics (IAAT)

Supervising Professor(s): Prof. Andrea Santangelo, Dr. Gerd Pühlhofer

About the Supervisor(s): Prof. Santangelo is the head of the High energy astrophysics Department of IAAT, whereas Dr. Pühlhofer has a permanent staff position and is coordinating the very high energy gamma-rays activities of the Institute.

Specification: PHD position in very high energy astrophysics. The position address observational and experimental aspects.

The last ten years have been characterized by the unveiling of the Universe at very High Energies (VHE) thanks to the observations of the HESS, MAGIC, VERITAS and LHAASO observatories. Currently the new large observatories at VHE the Cherenkov Telescope Array is being developed and has finally entered the construction phase in both the southern and the northern hemisphere. The High Energy astrophysics section of the Institute of Astronomy and Astrophysics is actively involved in VHE astronomy, both in the observational analysis of extreme sources and in developing hardware for the CTA observatory. The successful candidate will be involved in the observational analysis of Supernova Remnants and Gamma binaries emitting at VHE using a multi-wavelength approach. In addition the candidate will work on the development of the PMT based focal plane cameras for the Medium Size Telescope array of CTA, that has entered the construction phase in the two sites in Chile and La Palma. In the context of the study we expect to establish a collaboration with the LHAASO telescope which is revolutionising the view of the Universe at the even higher energies.

Degree: PHD degree

Required Degrees: Master degree

Language Requirements: English at C1 level, mostly certified by direct contact.

Notes: The candidate is expected to conduct the program in Tübingen. The requested program is for Funding line A for 48 months.