1 PhD Position and 1 Postdoctoral Position

Multi-Messenger High-Energy Astrophysics

The astroparticle group of Prof. Buson based at the University of Würzburg (DE) invites applications for

1 PhD student position (all genders welcome) and1 postdoctoral position (all genders welcome)

at the interface of high-energy astrophysics, time-domain and multi-messenger neutrino astronomy, with a starting date as early as July 2023. The positions are available in the framework of the project "Mapping Highly Energetic Messengers Throughout the Universe - MessMapp" funded under H2020-EU.1.1. - Excellent Science - European Research Council (ERC; Call: ERC-2020-STG, Proposal number: 949555).



Job description: The successful candidates will join the lively group of Prof. Sara Buson and pursue cutting-edge research in the multi-messenger astrophysics field. They will have the opportunity to join international research collaborations, working with data from state-of-theart observatories such as the Fermi Large Area Telescope and neutrino telescopes. The team primarily focuses on research on active galactic nuclei in the context of neutrino and cosmic rays astronomy. More about our team at the <u>MessMapp homepage</u>: https://messmapp.github.io/

Qualification requirements: The ideal candidates have, respectively, a Master's/PhD degree in physics or astrophysics for the PhD/postdoc position, a strong background in active galactic nuclei physics and/or high-energy astrophysics and/or neutrino astronomy, and solid knowledge of at least one programming language (Python, C++). Experience with radio and/ or X-ray observatories and/or neutrino data handling (e.g. IceCube, KM3Net, Antares, ..) is of advantage but not a prerequisite. The required knowledge of the English language is level B1 of CEFR or above.

Application material and deadline: Applications, including a <u>cover letter</u>, <u>curriculum vitae</u> including <u>publication list</u>, a brief <u>research summary and outlook</u>, and a copy of the Master's/ PhD <u>certificate</u> (or alternatively a statement from the supervisor stating the expected completion date of the Master's/PhD thesis), should be sent electronically preferably as a single PDF document to: sara.buson@uni-wuerzburg.de

Applicants should also arrange for <u>two letters of recommendation</u> to be sent separately to the e-mail address above.

Applications received by June 5, 2023 will be given full consideration. The positions will remain open after this first deadline until suitable candidates are found. Updates on the review progresses will be available at the <u>MessMapp homepage</u>.

Working environment: Computing resources and support for travelling are excellent. Group members have the opportunity to attend summer schools, international conferences and benefit from other educational and supporting measures. The group working environment will be stimulating and allow for personal growth.

Addition information: The appointment is for three years for the PhD position and two years for the postdoc position. The contracts are fixed-term positions. A possible extension depends on the availability of further funds and mutual satisfaction. The salary will be based on the German federal public service salary scale (E13 TV-L; 66% for PhD positions, 100% for postdoc positions), amounting to a gross salary of approximately 2900-3050 EUR per month for the PhD position (4400-4600 EUR per month for the postdoc position). Successful candidates will receive standard unemployment, health, and retirement benefits according to the German law.

We value equality and diversity in research and encourage members of underrepresented groups to apply.