PhD position in the field of massive stars and stellar atmospheres

We are seeking a highly motivated **PhD student (m/f/d)** to join the **new research group on stellar atmospheres of hot stars at Heidelberg University** led by Dr. Andreas Sander and funded by the DFG Emmy Noether Programme "Uncovering the cornerstones of our Universe: Application and Development of Next-Generation Stellar Atmospheres".

The group starts in August 2021 and is located at the Astronomisches Rechen-Institut (ARI). Its research revolves around the properties and impact of massive stars, using state-of-the-art and next-generation stellar atmosphere modelling with a particular scientific focus on evolved, massive stars. Beside the advertised position, the group will initially consist of the group leader, one postdoc, and another PhD student. The announced PhD project will be at the conjunction of theory and observations, employing stellar atmospheres to determine the impact of hot stars and draw theoretical conclusions. The project will make intense use of the calculation and application of expanding stellar atmosphere models with the opportunity to also participate in the future development of the underlying model atmosphere code (PoWR). Moreover, the group will have a major involvement in XSHOOTU and further ongoing collaborations within and beyond the massive star community.

The advertised position is available from August 1st, 2021. A later starting date can be negotiated. The initial appointment will be for a period of 3 years with the possibility for an extension depending on available funding. The salary will be based on the German federal public service salary scale (66 percent of E 13 TV-L) following the standard procedures for PhD students at Heidelberg University. The successful applicant will be enrolled as a PhD student at Heidelberg University and join a graduate school that offers excellent training opportunities.

About the ARI: As the PI institution of the DFG Collaborative Research Center SFB 881 "The Milky Way System", the ARI is a central pillar in the vibrant Heidelberg astronomical community and has a major role in the ESA Gaia mission as well as several other international projects. Together with the Landessternwarte Königstuhl (LSW) and the nearby Institut für Theoretische Astrophysik (ITA), the ARI forms the Zentrum für Astronomie der Universität Heidelberg (ZAH), the largest university astronomy group within Germany. The ARI is further closely connected to the University's Department of Physics and Astronomy and cooperates with the Max-Planck Institutes for Astronomy (MPIA), the Max-Planck-Institute for Nuclear Physics (MPIK) and the Heidelberg Institute for Theoretical Studies (HITS), offering outstanding collaboration and network opportunities for the project and the successful applicant. ARI researchers have access to all ESO facilities, including the VLT, and to the Large Binocular Telescope (LBT).

Requirements: Applicants need to have a master's degree in Physics/Astronomy or equivalent by the starting date. Additional expertise or research experience in stellar astrophysics and in particular in the fields of spectroscopy, stellar atmospheres, or stellar evolution may be advantageous.

How to apply: Please submit a motivation letter (maximum 2 pages) including a brief description of your Master or equivalent research project, a CV, relevant university certificates, and one letter of recommendation. Please also provide contact details of at least one additional referee who agreed to write a letter of recommendation upon request. Please combine all application documents into a single PDF (except the letter of recommendation) and send this document to andreas.sander@armagh.ac.uk including the keyword *[PhD Stellar Atmospheres]* in the subject line. The letter should be sent separately and directly by its author to the same email address with the same keyword. Applications submitted until **April 25th, 2021** will receive full consideration, but late applications will also be accepted until the position is filled. For further information please contact Dr. Andreas Sander via andreas.sander@armagh.ac.uk.

Included Benefits: Comprehensive social benefits are granted according to the regulations for public service. The salaries include employer contributions to medical and dental insurance, maternity and paternity leave, and retirement benefits.

Heidelberg University is a certified family-friendly employer and an equal opportunity employer. Women and members of under-represented groups are particularly encouraged to apply.