1 Postdoc and 2 PhD positions at KU Leuven, Belgium: The winds of hot and cool massive stars

Leen Decin, Hugues Sana, Jon Sundqvist, Alex de Koter

Institute of Astrophysics, KU Leuven, Celestijnlaan 200D, 3001 Leuven, Belgium

The Institute of Astronomy of the KU Leuven (Belgium) seeks highly motivated and excellent applicants to take on an important role in the MAESTRO project. Applications are invited for 1 postdoc and at least one2 PhD positions financed through a prestigious fundamental research grant (C1) from the KU Leuven university. The selected candidates will join the MAESTRO team, closely under the supervision of with Profs. Leen Decin, Hugues Sana, Jon Sunqvist and Alex de Koter and as part of an international network of collaborators to obtain crucial observational constraints and to develop new theoretical methods needed to progress our understanding of hot and cool massive star winds.

The MAESTRO project will open 6 positions in the next 3 years. Here, we sSpecifically advertise the following 1 postdoc and 2 PhD positions:
- PhD position: Theory of Wolf-Rayet winds â€“ The PhD student will aim to develop a theoretical framework for the radiative acceleration that drives the winds of Wolf-Rayet (WR) stars and obtain theoretical predictions for global wind properties and their scaling with fundamental stellar parameters.

- PhD position: Observations of Red Supergiant winds â€“ The PhD student will aim to derive the geometrical and dynamical wind structure of Red Supergiants (RSGs) using existing retrieval methods and will study the current morphology and mass-loss evolution during the RSG life time, and the mass-loss signatures at low metallicities.

- Postdoc position: Observations of hot and cool massive stars â€“ The postdoc will be responsible for the observational aspects of the MAESTRO projects. Task encompass among other: collect, reduce and/or organize a multi-wavelength data-set covering hot (OB, WR) and cool (RSGs) massive stars across a wide metallicity range, develop and/or adapt the necessary techniques to analysis crowded regions and unresolved small clusters. Lead the analysis of these data, include the daily supervision of students in the MAESTRO project.

Attention/Comments: More information on the projects and instruction to apply are to be found on https://fys.kuleuven.be/ster/Projects/maestro

Weblink: https://fys.kuleuven.be/ster/vacancies/maestro-vacancies
Email: Leen.Decin@kuleuven.be
Deadline: Jul 15, 2017