

Postdoctoral position on Gaia and massive stars

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The High-Energy Astrophysics Group (http://www.gaphe.ulg.ac.be/index_e.html) of the Department of Astrophysics, Geophysics and Oceanography (http://www.ago.ulg.ac.be/index_e.php) of the University of Liege (Belgium) is offering a postdoctoral position to participate in the development of projects related to massive stars and the ESA cornerstone mission Gaia. The position is funded by Concerted Research Actions (ARC) programme.

The High-Energy Astrophysics Group (GAPHE) carries out a variety of research projects aiming at studying single and binary massive stars (OB, Wolf-Rayet, Luminous Blue Variables, ...) and the interactions with their environment based on data obtained with world-class, space-borne (XMM, Chandra, ...) or ground-based (ESO, ...) facilities.

The Gaia satellite is currently performing an all-sky survey providing astrometry and photometry for about one billion stars, and spectroscopy for a subsample. The first data are due to be released to the whole community in summer 2016. This release will include parallaxes and proper motions of unprecedented accuracy for about 2.5 million bright sources (see <http://www.cosmos.esa.int/web/gaia/release>), among which a large number of massive stars. On the other hand, members of the GAPHE are involved in the Gaia-ESO survey (<https://www.gaia-eso.eu/>), whose main goal is to complement the Gaia data by providing precise chemical abundances. As part of this survey, spectroscopic data are being collected for numerous hot stars in young open clusters (Carina Nebula, ...).

The successful candidate will develop projects making use of the data for hot stars from the first (2016) and second (2017) Gaia data releases. In parallel, he/she is expected to analyse the data for OB stars obtained by the Gaia-ESO survey, with a particular emphasis on the determination of the atmospheric parameters, chemical composition and wind properties.

Applicants with interest and previous experience in massive star research are invited to apply. Expertise in the determination of fundamental parameters and abundances of massive stars, analysis of spectroscopic data, knowledge of model atmosphere codes for hot stars (CMFGEN, TLUSTY, ...) and astronomical softwares (IRAF, MIDAS, ...) are an advantage but are not mandatory.

Applicants should have a record of publications in peer-reviewed journals, demonstrated creativity, independence, high motivation, good communication skills, and the ability to work independently as well as in collaboration with other members of our research group.

The appointment is initially for one year with a possible extension for a second year subject to funding and performance. The starting date is negotiable but preferably before June 1st, 2016. To be eligible, the applicant should not have lived or worked in the 'Federation Wallonie-Bruxelles' for more than 24 months over the last three years. The salary is on the official Belgian public employee pay scale for a young Post-Doc. Funding for travel and research equipment is available.

Interested persons should send their application material including a curriculum vitae, a summary (one page at most) of past and current research activities, a letter of interest, a full publication list and a list of three reference persons by e-mail to: Eric Gosset/Gregor Rauw, Institute of Astrophysics and Geophysics, Quartier Agora, Batiment B5c, Allee du 6 Aout, 19c, 4000 Liege, Belgium (e-mail: gosset@astro.ulg.ac.be, rauw@astro.ulg.ac.be). The application deadline is May 1st, 2016. For any further inquiry, please e-mail: gosset@astro.ulg.ac.be.

Attention/Comments:

Weblink: http://www.ago.ulg.ac.be/Edu/Jobs/Job_54.pdf

Email: gosset@astro.ulg.ac.be

Deadline: May 1st, 2016