

PhD position in stellar astrophysics

The Department of Astronomy and Astrophysics at the University of Valencia works on a variety of topics such as radio observations, theoretical cosmology, and relativistic astrophysics including compact stellar objects, supernovae and gamma-ray bursts, and gravitational waves. Within this department, the research group *Computer Aided Modelling of Astrophysical Plasma* has an opening for a PhD position in the field of

Core-Collapse Supernova Physics.

A major focus of our group lies on the numerical modelling of stellar core collapse with rotation and magnetic fields. We are looking for a young researcher intent on contributing to this line of research under the supervision of M. Obergaulinger and M.Á. Aloy. Carrying out a PhD project in this field benefits from a familiarity with or interest in numerical magnetohydrodynamics and neutrino transport, multi-messenger astrophysics, and high-performance computing. Applicants should hold a Master degree (or equivalent) in physics or astronomy. A good knowledge of stellar astrophysics, experience in numerical modelling, and a good command of the English language are advantageous for the position. The successful candidate will enrol in the PhD programme of the University of Valencia offering courses and seminars to complete their formation. The thesis project is expected to be completed in three years. The student will be hired with a labour contract with the salary and benefits (including health insurance) which are typical at the University of Valencia.

We aim to fill the position as soon as possible, but we have certain flexibility regarding the starting date. We are looking forward to receiving your application by the 1st of November 2021 via email to martin.obergaulinger@uv.es. Applications should include a motivation letter, copies of the Master degree (or equivalent), a curriculum vitae and statement of previous research, and the name and contact details of at least two experienced scientists willing to provide a letter of reference.

The University of Valencia emphasizes equal opportunities and diversity in its personnel policy and strives to increase the percentage of women and thus expressly encourages women to apply.

For further questions please contact Martin Obergaulinger, martin.obergaulinger@uv.es.