

PhD Position in Astrophysics at the University of Crete

The Astrophysics Group at the Department of Physics, University of Crete in Greece is inviting applications for a fully funded 3-year PhD student position in studies of magnetic fields in blazar jets through optical polarization.

The student will be recruited in the framework of the RoboPol program (an international collaboration between the University of Crete, Caltech, the Max-Planck Institute for Radioastronomy, the Nicolaus Copernicus University, and the Inter-University Center for Astronomy and Astrophysics). RoboPol is a large-sample, high-cadence, polarimetric monitoring program of blazars in optical wavelengths, using a camera specifically constructed for this project, mounted at the University of Crete's Skinakas Observatory 1.3 m telescope. The analysis of RoboPol data will be conducted in conjunction with Fermi gamma-ray data, and multi-frequency radio data from the OVRO (Caltech), F-GAMMA (MPIfR), and Torun (NCU) monitoring programs. The study of interstellar medium magnetic fields through observations of the polarization of background stars in absorption is a secondary, supplemental science goal of the program. The program is accompanied by a complementary effort in theory and phenomenology. The student will be working closely with the U. of Crete RoboPol team (Kylafis, Papadakis, Pavlidou, Reig, Tassis) and will have the opportunity to collaborate with the other members of the Astrophysics Group in Crete, as well as the international RoboPol collaborators.

The position is open to students of all nationalities who at the start of the position have the equivalent of a Master's degree in astronomy or physics. Students without a Master's degree should first apply to and complete the one-year intensive Graduate Program in Advanced Physics at the University of Crete (details here: http://gradstudy.physics.uoc.gr/1/en/index\_en.html -- also please look at the "Admissions" and "PhD program" links on the same page). The deadline for applications is July 1st, 2012 for the PhD program, and July 15th, 2012 for the Master's program. Good oral and written communication skills in English are required.

Interested candidates should contact Vasiliki Pavlidou at pavlidou@physics.uoc.gr as soon as possible, and send a CV, a brief description of their research interests and the names, e-mail addresses, and telephone numbers of at least two referees.

The University of Crete is the Department of Physics consists of about 30 faculty members and almost as many PhD researchers in term positions. It is known internationally for high quality research in all areas of modern physics, including applied physics, astrophysics and space physics, atomic and molecular physics, condensed matter physics, and nuclear and elementary particle physics.

The position is funded by GSRT within the "Excellence" ("Aristeia") programme for three years, and includes funding for participation to international conferences, visits to the other collaboration institutions, and the possibility of the student spending up to six months at Caltech in the US during the preparation of their dissertation. Further details concerning the cost of living in Greece, as well as contact information of former PhD students and postdoctoral members of the Astrophysics Group in Crete are available upon request.