PhD position in Astroparticle Physics

Gamma-ray Astrophysics with GLAST

A PhD student position is available working with data analysis of the LAT (Large Area Telescope) instrument as part of the GLAST mission (Gamma-ray Large Area Space Telescope). The GLAST Mission is part of NASA’s Office of Space and Science Strategic Plan, with launch anticipated in 2007. GLAST is a next generation high-energy gamma-ray observatory designed for making observations of celestial gamma-ray sources in the energy band extending from 10 MeV to more than 100 GeV. See further http://www-glast.stanford.edu/index.html

One of the many scientific goals of the GLAST is the search for signals from supersymmetric dark matter in the halo of the Galaxy. This is of particular interest to the Swedish part of the collaboration. Annihilations of Dark Matter particles give a diffuse background in the gamma spectrum but can also result in monoenergetic gamma lines and other structures above 30 GeV, observable in the direction of density enhancements inside or outside the Milky Way.

GLAST components will during 2006 undergo several weeks testing in an accelerator beam at CERN, the European Particle Physics laboratory outside Geneva. The PhD student is expected to participate in those tests as well as in the subsequent data analysis in order to prepare for the data analysis for the imminent launch of GLAST.

This PhD position is a collaboration between the section of Particle and Astroparticle Physics at the Royal Institute of Technology (KTH) in Stockholm and the Physics division at Kalmar University. The PhD student will be registered and predominantly work at KTH.

We expect applications before latest 15. March 2006.

For further information, please contact Jan Conrad at KTH: conrad@particle.kth.se, +46(0)8-55378115 or Staffan Carius at Kalmar: staffan.carius@hik.se, +46(0)480-446714.

The KTH Astroparticle Physics group is part of the High Energy Astrophysics and Cosmology Centre. For more information, look at: http://heac.albanova.se/