



KTH Engineering Sciences

Postdoctoral scholarship

Balloon-borne Soft Gamma-ray Polarimetry

at the School of Engineering Sciences, Department of Physics, The Royal Institute of Technology, KTH, Stockholm, Sweden.

The School of Engineering Sciences carries out a wide range of research at the international front line, from fundamental disciplines such as physics and mathematics, to engineering mechanics with applications such as aeronautics and vehicle engineering. The teaching programme includes university degree programs in Engineering Physics, Vehicle Engineering, 'Engineering and Education', and 'Open Entrance', as well as a number of International Masters Programmes.

The Astroparticle Physics group with the Physics Department of The Royal Institute of Technology (KTH) in Stockholm (<http://www.particle.kth.se/astro>) is developing a balloon-borne high sensitivity soft gamma-ray polarimeter, PoGOLite (<http://www.particle.kth.se/pogolite>) in collaboration with groups from Stockholm University, Stanford University, Hawaii University, Tokyo Institute of Technology, Hiroshima University, ISAS, Yamagata University, and École Polytechnique.

This activity forms part of the Stockholm High Energy Astrophysics and Cosmology (HEAC) Center, a collaborative effort between research groups at the KTH Physics Department and the Stockholm University Astronomy and Physics Departments, which is supported by the Swedish research council as a strong research environment.

The PoGOLite pathfinder mission is scheduled to fly from the North of Sweden in 2010. The successful applicant is expected to make significant contributions to the development, construction and testing of the PoGOLite pathfinder instrument and associated balloon systems. Contributions to science performance studies and observation planning are also expected. Applicants should have a strong technical background. Previous experience in one or more of the following areas is particularly welcomed - scientific ballooning, attitude control systems, instrument electronics, hardware programming, and mechanical design. Excellent communication skills in English are required.

The position is limited to two years, and is available immediately. Applicants should hold a PhD in astrophysics, astroparticle physics, particle physics, or a related subject obtained no later than five years prior to starting the position. KTH aims to employ a diversity of talent and thus welcomes applicants who will add to the variety of the University, especially as concerns its gender structure.

To apply, a curriculum vitae, description of research experience and interests, and a list of publications (preprints not required) should be sent to: Carina Ankarloo, KTH, Department of Physics, AlbaNova University Centre, SE-10691 Stockholm, Sweden. E-mail applications (PDF) are preferred and can be sent to ankarloo@kth.se. Up to three recommendation letters may be sent to the same addresses. All sent materials should be marked with reference number S-2008-0044. The review of applications will start on March 3rd 2008, and continue until the position is filled.

Further information can be obtained from Prof. Mark Pearce, pearce@particle.kth.se, +46-8-55378183.