



The Gamma Ray Astronomy group at Michigan Technological University has an opening for a postdoctoral position. We are seeking a highly qualified individual with interest and experience in the experimental aspects of astrophysics and particle physics in general and the detection of **gamma and cosmic rays** in particular. The group is actively involved in the design and construction of the **HAWC Observatory** and in the analysis of existing **Milagro data** (<http://www.phy.mtu.edu/faculty/Huentemeyer.html>). The position will have equal components of data analysis and detector development. Construction of HAWC, the world's most sensitive wide field of view TeV gamma ray detector, has begun this year and initial physics operation is scheduled for early 2012. An engineering array of seven tanks, called VAMOS, is already in operation and taking air shower data. A successful candidate will have the opportunity to analyze the first data from this engineering array and the complete HAWC array.

Experience with programming languages like C++ and Python and with the technology of water Cherenkov detectors will be valued. The successful candidate will be based at the MTU campus in Houghton, in Michigan's Upper Peninsula (<http://www.mtu.edu>), and will be expected to travel to the HAWC site near Puebla, Mexico, for detector deployment, maintenance, operations, and shifts.

Research possibilities include studies of diffuse gamma ray emission, extended and point sources of TeV gamma rays and anisotropy studies with cosmic ray data. We are also heavily involved in the design of the HAWC calibration system for which we are developing both software and hardware and are performing simulation studies. There exists a lively collaboration with the local Pierre Auger Observatory group.

Applicants must have a Ph.D. in Physics, in Particle, or in Astrophysics, as well as research experience in experimental cosmic-ray physics, gamma-ray physics, or related fields, such as elementary particle physics and astrophysics. The candidate must have demonstrated the ability to initiate and carry out experiments resulting in peer reviewed publications.

Candidates will be considered until the position is filled. The anticipated starting date of the appointment is February 2012. Interested candidates should send their application information (including a letter expressing interest and experience related to the job description, a current resume, list of publications, and the names, e-mail addresses, and phone numbers of three references) to **Prof. Petra Huentemeyer** (petra@mtu.edu).

Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.