Openings for post-doctoral and graduate researchers at GEO600 gravitational-wave detector

www.geo600.org

www.aei.mpg.de

www.gw-indigo.org

The search for gravitational waves (GWs) from loud astronomical events has been going on for almost 50 years without a detection. In the next few years, a new generation of interferometric detectors (LIGO, Virgo, KAGRA) will be operating with unprecedented sensitivities. If general relativity is correct, the astrophysics community predicts that these sensitivities will finally be large enough to make a detection.

Plans are well underway for a third LIGO to be built in India which would then significantly increase the astrophysical observing power of the worldwide network of interferometers. It is foreseen that this instrument could come online as early as 2022. Due its complexity, installing, running, and maintaining LIGO-India will require a scientific, on-site team with many years of experience on similar instruments. It is then crucial to start training Indian scientists now. Since this will be the first GW interferometer in India, it is important to gather some experience offshore at one of the existing facilities.

GEO600 is a 600m long interferometric GW detector located near Hannover, Germany and run by the Albert Einstein Institute in Hannover. As the other large interferometer sites are currently installing the next generation of instruments, GEO600 is the only place where experience can be gained on an operating, interferometric GW detector. We have positions open at both the post-doctoral or graduate researcher level. The main lines of research currently pursued are increasing the laser power, integrating a squeezed light source, novel control schemes, and searching for unexplained sources of noise. Independent of what the work turns out to be, because of the large similarity between all GW interferometers, experience gained at GEO600 will prove to be invaluable to those looking toward commissioning the next generation of instruments.

Applications should include a curriculum vitae, statement of purpose, and three or more letters of recommendation each with the recommender's contact information. The curriculum vitae should include, where applicable, the applicant's contact information, coursework, expected or received degrees, prior employment, and a list of publications. The statement of purpose outlines the reasons for applying. It describes the applicant's past experiences as well as future career goals in relation to this position. Applicants with previous experience in electronics would have an easier time making an impact so we will take this into consideration but it is by no means a requirement. Applicants should also be interested and possibly experienced in practical hands-on work with high precision optics and electronics. For the PhD positions, the applicants should have a Masters in Physics or equivalent degree. For the postdoc positions, the applicants should have a PhD in Physics or a related field.

Please send your queries and e-mail applications to:

geo600.grad@gw-indigo.org
(graduate student applications)

geo600.postdoc@gw-indigo.org
(postdoc applications)

DEADLINE 31 DEC 2013