The particle physics group of the University of Bristol is looking for outstanding applicants to fill at least three fully funded PhD studentships in the SoLid and CMS experiments. In particular:

One studentship will play a major role in Bristol’s involvement in the SoLid experiment. The SoLid experiment is a short baseline reactor neutrino experiment aiming to confirm or refute the existence of a ‘sterile’ neutrino as hinted by previous generation experiments. The post will involve the commissioning and calibration of the detector in preparation for data taking, followed by an analysis of the collected data.

Further studentships are available to work on the CMS trigger upgrade program. The Bristol CMS group is highly active in the Level-1 trigger, taking a leading role in the upgrade for the high luminosity LHC era. The group has a strong physics program in searches for exotic Higgs decays, Supersymmetry and dark matter, and measurements of the top quark. Successful applicants will work on a mixture of topics including design studies, hardware implementation, optimisation for physics, and analysis of current CMS data.

In addition, funding is available for students to work jointly on electronics R&D for data processing at future detectors, and/or trigger studies for a future circular hadron collider, in conjunction with one of the current experiments in the Bristol program.

The deadline for applications is September 8th, 2016 although applications received after the deadline will be considered until the positions are filled. Applications should be made using the University’s central system by following the link below: http://www.bristol.ac.uk/study/postgraduate/apply/

Applicants are expected to have a four-year undergraduate degree, or a Masters/diploma, in physics or a relevant field. An interest in experimentation and detector development is encouraged. Experience in modern programming languages, such as C++, and scripting languages will be valued.

The funding is available for 3.5 years. Due to the nature of the funding, only applicants from the EU and the wider EEA will be considered.

The particle physics group of the University of Bristol has a rich experimental particle physics program and is involved in the CMS, LHCb and NA62 experiments at CERN. The group also participates in future experiments including SoLid, DUNE, SHiP and ILC, with a strong knowledge exchange with industry and other fields.

For further information, please contact:
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