

# PhD Studentship in Particle Physics Phenomenology at the NExT Institute



The NExT Institute (<http://www.next-institute.ac.uk>), a partnership involving the University of Southampton, the Rutherford Appleton Laboratory (RAL), Royal Holloway University of London (RHUL) and the University of Sussex, is offering a PhD studentship in particle physics phenomenology.

The institute promotes work at the interface between theory and experiment and the research project for this position is entitled “Delineating Underlying New Physics at the LHC”. This project will focus on the interpretation of New Physics (NP) signals observed at the LHC and strategies for disentangling the various NP scenarios such as Supersymmetry, Extra Dimensions as well as Technicolor-type models with dynamical electroweak symmetry breaking.

Financial support is provided by the [Higher Education Funding Council for England \(HEFCE\)](#) as part of a [five-year grant of £12.5 million](#) bringing together physics departments in the South East of England through the [South East Physics Network \(SEPNet\)](#). The studentship will be funded for 3 years as follows:

1. The student will receive current UK/EU fees plus a yearly stipend of £12940.
2. In addition, a research training support grant of £1200 per year will be awarded for travel within and outside the Institute.
3. The main purpose of this studentship is to provide an opportunity to carry out research to PhD level on topics in particle physics phenomenology of direct relevance to the Large Hadron Collider (LHC).
4. Training and research will be part of a novel PhD programme being developed in the context of the NExT Institute. This will involve mixed (theoretical and experimental) training and joint/shared supervision, networking across all nodes, student placements at experiment locations and in industry, video-linked delivery of seminars and graduate lectures, annual workshops and a final graduate conference.
5. The student will formally be enrolled with the University of Southampton and thus will need to satisfy the entry requirements for its PhD programme which can be found at <http://www.hep.phys.soton.ac.uk/phd/>.
6. The studentship will start at the beginning of October 2009.

Informal contact can also be established at Southampton with Dr. Alexander Belyaev ([A.Belyaev@soton.ac.uk](mailto:A.Belyaev@soton.ac.uk)) and at RAL with Dr Claire Shepherd-Themistocleous ([Claire.Shepherd-Themistocleous@stfc.ac.uk](mailto:Claire.Shepherd-Themistocleous@stfc.ac.uk)).