

# SEPnet PhD Studentship in Condensed Matter Theory

## *University of Kent and STFC Rutherford Appleton Laboratory*

Applications are sought for a PhD studentship in condensed matter theory funded by the SEPnet collaboration. The successful candidate will work under the supervision of Dr. J. Quintanilla at the Science and Technology Facilities Council's Rutherford Appleton Laboratory (RAL). There will be opportunities to collaborate with experimentalists working on these subjects at RAL's ISIS neutron and muon source and with other theorists in the SEPnet collaboration.

The studentship is available to work on magnetic monopole excitations that have been recently discovered in spin ice materials. In particular, the influence of defects and surfaces on these novel quasi-particles will be investigated. Other research topics in the group include: spontaneous deformations of the Fermi surface in strongly-correlated metals; unconventional superconductors; ultra-cold atoms in optical lattices; magnetic nano-structures; and quantum information.

Candidates must hold a good Honours degree (First or 2i) or a Master's degree in a relevant subject or equivalent. Applications can be made online at: <http://records.kent.ac.uk/external/admissions/pgapplication.php>. As part of the application process, candidates will also be required to submit the following:

- A covering letter
- Two academic references
- A transcript of degree results to date
- A full CV

The studentship covers all fees for UK or EU students plus a stipend of £13,290 p.a. In addition a research training support grant of £1,200 p.a. will be awarded for travel or fieldwork. The studentship is available immediately. Review of applications will continue until the position is filled.

Additional information:

- SEPnet: <http://www.sepnet.ac.uk>
- ISIS Facility: <http://www.isis.stfc.ac.uk>
- Functional Materials Group: <http://www.kent.ac.uk/physical-sciences/research/fmg/index.html>
- FMG outpost: <http://blogs.kent.ac.uk/strongcorrelations>

Prospective candidates are encouraged to send informal enquiries to

Dr J Quintanilla

*School of Physical Sciences, University of Kent and ISIS Facility, STFC Rutherford Appleton Laboratory*

*Mail address: ISIS Facility,  
STFC Rutherford Appleton Laboratory,  
Harwell Science and Innovation Campus,  
Didcot OX11 0QX.*

*Telephone: 01235446353*

*E-mail: [j.quintanilla@kent.ac.uk](mailto:j.quintanilla@kent.ac.uk)*