



School of Physics and Astronomy

PhD Studentship – Laser based ARPES from ultra-pure correlated metals

Studentship covers tuition fees at the UK/EU level and provides a bursary of £13,240 - £14,235 p.a. for 3 ½ years

The group of Dr F. Baumberger has a PhD Studentship in experimental condensed matter physics available. The candidate will be part of a small team working on an ambitious project funded by the European Research Council aiming to develop a narrow bandwidth laser based UV source for ultrahigh resolution angle resolved photoemission spectroscopy (ARPES) from solids.

The initial goal will be to design and setup a highly intense UV light source. After successful commissioning the new source will be coupled to an existing state-of-the-art electron spectrometer. This combination will be extremely powerful for ultra-high resolution electronic structure studies of complex materials. During the second half of the PhD it is planned to use the new experimental facility to study the quantum many-body states of ultra-pure low dimensional correlated electron systems by means of angular resolved photoemission. Preliminary experiments on the materials of interest will be performed in-house on a modern ARPES spectrometer equipped with a conventional light source and at synchrotron facilities abroad.

The successful candidate is expected to be a skillful and original experimenter with a broad and profound background in physics. Knowledge and experience in photonics, spectroscopy, or correlated electron physics is advantageous but not a necessary condition for the position.

The post is for 3 ½ years, starting 1 November 2008, or as soon as possible thereafter.

Informal enquiries to: Dr F Baumberger, felix.baumberger@st-andrews.ac.uk

How to apply

Please send your CV and two references to Dr F Baumberger, felix.baumberger@st-andrews.ac.uk

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