Postdoctoral Research Assistant in Low Temperature Quantum Materials

Department of Physics, Clarendon Laboratory, Oxford

Grade 7: £32,817– £ 40,322 p.a. (Fixed term until Sep 2023)

Applications are invited for a Postdoctoral Research Assistant in Low Temperature Quantum Materials Physics. The project is part of a research programme to investigate emergent properties of quantum condensed matter systems in the presence of strong electron correlations and spin-orbit couplings funded by an ERC grant in the Quantum Magnetism group led by Prof. Radu Coldea. The group has a strong research track record in the discovery and exploration of novel forms of electronic order and dynamics, and quantum phase transitions in magnetic materials https://www.physics.ox.ac.uk/research/group/quantum-magnetism-and-quantum-phase-transitions. The successful candidate will be an ambitious scientist keen to work on challenging experimental research projects to investigate frustrated quantum magnets and topological magnetic materials in search for novel correlated quantum behaviour in the regime of low temperatures and high magnetic fields.

The role will involve performing low-temperature thermodynamic and magnetic properties measurements, analysing, understanding and presenting the results.

Applicants should possess, or be close to completing a doctorate in physics or a related field to the research area of the role.

Previous experience in any or all of the following will be an advantage: (i) operating wet sub-Kelvin refrigerators (He-3/He-4 dilution refrigerators and/or He-3 condenser system), (iii) designing, building and operating complex experiments and/or customized setups for physical properties measurements, (ii) operating Helium leak detectors, turbopumps, lock-in amplifiers, resistance bridges, current sources, nanovoltmeters, (iii) writing software for computer control of measurement equipment using Labview/Python/Matlab Instrument Control.

Candidates are expected to have a strong record of personal research and achievement, very good communication/scientific report writing/presentation skills, ability to work well independently as well as in a team, strong self-motivation.

Please direct enquiries about the role to Radu Coldea (radu.coldea@physics.ox.ac.uk).

You will be required to upload a supporting statement including research interests and how you meet the selection criteria, CV and details of two referees as part of your online application. You should ask your referees to submit their references before the closing date, as described in the further particulars below.

The application deadline is **midday (UK time) on 28 June 2021**.

For more details and how to apply follow
https://my.corehr.com/pls/uoxrecruit/erq_jobspec_details_form.jobspec?p_id=151292
or
https://www.nature.com/naturecareers/job/postdoctoral-research-assistant-in-low-temperature-quantum-materials-physics-university-of-oxford-741181