School of Physics, University of Edinburgh, UK

We are seeking to recruit two Postdoctoral Research Associates in the areas of Experimental Nuclear Astrophysics and Experimental Dark Matter Detection, as part of research activities of the Edinburgh Nuclear Physics Group.

**Postdoctoral position in Experimental Nuclear Astrophysics (Reference # 3004899)**

Supernovae are some of the most remarkable phenomena in the Universe. Not only are they important astronomically, but the mechanisms that drive them provide a laboratory to study some of Nature’s most extreme physical conditions. This post will be to support research into the key nuclear reactions involved in core-collapse supernova nucleosynthesis. Experiments are to be conducted at radioactive beam facilities in Europe and the US. The successful candidate will take a leading role in preparing and conducting these experiments, as well as in data analysis and writing up of the results.

EPSRC funding for the post will be available from 1st November 2005 and has a duration of 30 months. The appointment will be made on the AR1A salary scale based on experience. A Ph.D. in experimental nuclear or particle physics is required.

**Postdoctoral position in Experimental Dark Matter Research (Reference # 3004900)**

The majority of matter in the Universe is thought to be non-baryonic, and its detection is recognised as one of the outstanding challenges in contemporary science. The Edinburgh Nuclear Physics group is a member UK Dark Matter Collaboration, which is conducting experiments at the Boulby mine in North Yorkshire to detect weakly interacting massive particles, the leading candidate for cold dark matter.

This post will primarily be in support of the liquid xenon based ZEPLIN-II device. The successful candidate will find opportunities to take leading roles in many aspects of the project, including data acquisition, data analysis, response and background simulations, as well as possible upgrades. Contributions to the Collaboration’s novel DRIFT-II devices, and to our efforts to vastly enhance sensitivity through advances to current technologies, will also be welcomed.

PPARC funding for the post is available from 1st October 2005 and initially has a duration of 18 months, although with future funding success it is hoped this period will be extended. The appointment will be made on the AR1A salary scale based on experience. A Ph.D. in experimental particle or nuclear physics is required.

Further information on the diverse research programme of the Nuclear Physics Group may be found at [www.ph.ed.ac.uk/nuclear](http://www.ph.ed.ac.uk/nuclear), while details of the UK Dark Matter Collaboration may be found at [http://hepwww.rl.ac.uk/ukdmc](http://hepwww.rl.ac.uk/ukdmc). Informal enquiries about these posts should be directed to Dr Alex Murphy (email: a.s.murphy@ed.ac.uk, tel: 0131 650 5285).

Formal applications should be made via the University of Edinburgh recruitment service, quoting the reference numbers indicated; see [https://www.jobs.ed.ac.uk](https://www.jobs.ed.ac.uk).