



Two PhD studentships in Nuclear Astrophysics and Nuclear Structure

The School of Physics and Astronomy at the University of Edinburgh is pleased to offer two fully funded PhD studentships in the area of **Nuclear Physics**.

The **Edinburgh Nuclear Physics Group** enjoys a strong international reputation in the areas of Nuclear Astrophysics and Nuclear Structure. Our research aims at understanding the nuclear processes that forge the elements during stellar evolution and during the Big Bang. This requires experiments with stable and radioactive nuclei, including neutrons, to study the nuclear reactions taking place in explosive scenarios such as novae, supernovae, or merging stars, as well as high sensitivity experiments underground to study reactions at the very low energies occurring in quiescent stars, such as our sun. We further investigate the fundamental properties of atomic nuclei by performing precision measurements of masses and radioactive decays, focusing on exotic, short-lived species. Studies of these exotic nuclei reveal new phenomena and insights into the evolution of nuclear structure far from stability, allowing for stringent tests of nuclear models, and yielding critical inputs for modelling explosive nuclear astrophysical phenomena.

We propose and lead experiments at major international facilities such as ARGONNE (USA), CERN (Switzerland), GSI-FAIR (Germany), LNGS (Italy), NSCL-MSU (USA), RIKEN (Japan) and TRIUMF (Canada) often with equipment developed in Edinburgh.

The Nuclear Physics Group offers two competitive PhD studentships, which may also be allocated to international students. Details of specific projects can be found on our website: <https://www.ph.ed.ac.uk/studying/postgraduate-research/research-opportunities/nuclear-physics>

As a successful applicant you will have a good Honours degree (2.1 or above, or its international equivalent) in a relevant discipline. You will join our group of around 10 PhD students, 2 postdoctoral researchers and 6 academic staff members to undertake exciting and vibrant research working with world-leading facilities in a multi-national, multi-cultural, environment. The University of Edinburgh is part of the Scottish Universities Physics Alliance (SUPA) offering access to a wider graduate school and research community across Scotland.

To apply for this PhD please see the “how to apply” page: www.ph.ed.ac.uk/studying/postgraduate-research/how-apply and follow the below link to the University of Edinburgh application portal: <https://www.ed.ac.uk/studying/postgraduate/degrees/index.php?r=site/view&edition=2023&iid=192>

Research Council scholarships cover fees and provide tax free stipends for living costs for 42 months. The initial application deadline is 20th of January 2023, however, applications reached after the deadline will continue to be considered until all positions filled.

For informal enquires please contact Moritz Pascal Reiter (mreiter@ed.ac.uk) or the respective project supervisors given on our website for project specific questions.

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