

# Postdoctoral research position at the University of Jyväskylä, Finland

The University of Jyväskylä is a nationally and internationally significant research university and an expert on education that focuses on human and natural sciences. The University is Finland's leading expert in teacher education and adult education, as well as the major exporter of education. The Faculty of Sport and Health Sciences is the only one in the country. The University of Jyväskylä is known for its dynamic operating culture and strong commitment to social responsibility.

## **Postdoctoral Researcher in Nuclear Spectroscopy, 24 months starting earliest 1.10.2017**

The successful candidate for the position will work in the Nuclear Spectroscopy Group of the University of Jyväskylä. Experiments carried out by the Nuclear Spectroscopy Group occupy one third of the beam time available at the Accelerator Laboratory of Jyväskylä, most of them dedicated to studies of the structure of neutron-deficient exotic nuclei and of super-heavy elements.

The successful candidate will join the project "Structure of intruder states in heavy nuclei" and will contribute in all activities of the Nuclear Spectroscopy group. The main part of his/her work will be dedicated to feasibility studies and development of transfer reaction techniques in the investigation of the intruder states in the neutron-deficient lead region. Experiments will be conducted using the MINIBALL and upcoming ISS spectrometers employing radioactive heavy-ion beams at HIE-ISOLDE, CERN. Complementary experiments will be carried out at JYFL. This project is funded by the Academy of Finland and is conducted in collaboration with the University of Liverpool, University of Manchester, STFC Daresbury (all UK), Katholieke Universiteit Leuven (Belgium) and Technische Universität Darmstadt (Germany).

Candidates should have a PhD in experimental nuclear physics. Experience in gamma-ray and/or charged particle spectroscopy, radioactive beams, transfer reactions and simulations are considered beneficial. Willingness to travel is required.

The Department of Physics is an internationally recognized research and teaching unit. The main research areas in the Department are particle physics, material physics, and nuclear and accelerator-based physics. The research in particle physics is carried out in cosmology, neutrino physics, physics of ultra-relativistic heavy ion collisions, and Beyond the Standard Model physics. In condensed matter physics experimental research of nanophysics and nanoelectronics (especially low temperature physics in nano- and microstructures as well as molecular electronics) with their applications are carried out as well as research of porous and disordered materials and crystal defects. Themes of theoretical and computational material physics are atomic clusters, metal nanoparticles, quantum dots, nanowires, catalytic surfaces and other nanoscale structures, soft matter and statistical physics by using many-body theory and numerical modeling. In nuclear and accelerator based physics in the Accelerator Laboratory the research focuses on studies of atomic nuclei and nuclear matter under extreme conditions, with many links to material physics and applied research. Furthermore the Department is contributing to the ALICE and ISOLDE experiments in CERN as well as Facility for Antiproton and Ion Research in GSI and FAIR Laboratories. The focus of the research in theoretical nuclear physics is on nuclear models and their applications.

The duties and qualification requirements for the position of the Postdoctoral researcher are stipulated by the University of Jyväskylä Regulations. The selected person is required to have a full command of Finnish language. According to Finnish law, a non-native university teaching and research staff member can be granted an exemption from the requirement of Finnish language proficiency. A good English language skill is regarded as a merit.

The job-specific salary component of a postdoctoral researcher is based on the job demands level 5-6 (2865,30 - 3340,77 €/kk) according to the salary system concerning teaching and research staff at universities. In addition, a personal performance-based salary component amounting to the maximum of 46.3% of the job-specific salary component is also paid.

A trial period of four months will be used when the position is first filled.

For further information, please contact:

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Please attach the following documents to the online application form:

1. Curriculum vitae (CV), composed according to good scientific practice and considering, when possible, the template for a researcher's curriculum vitae by the Finnish Advisory Board on Research Integrity. See <http://www.tenk.fi/en>.
2. Application
3. Numbered list of publications covering all the scientific and other publications of the applicant

Please submit your application at the latest on 15.9.2017 using the [online application form](#).