PhD position Experimental nuclear physics (1.0 FTE) (219415)

Organisation

The University of Groningen has an international reputation as a dynamic and innovative centre of higher education offering high-quality teaching and research. Balanced study and career paths in a wide variety of disciplines encourage the 31,000 students and researchers to develop their own individual talents. Belonging to the best research universities in Europe and joining forces with prestigious partner universities and networks, we are truly an international place of knowledge.

Job description

The project NEXT – Neutron-rich EXotic nuclei produced in multi-nucleon Transfer reactions recently received funding through an ERC starting grant. PI of the grant is Julia Even, Assistant Professor at the University of Groningen. The project will be embedded within the Van Swinderen Institute for Particle Physics and Gravity (VSI) at the University of Groningen.

Within the project, a new solenoid-based spectrometer for multi-nucleon transfer reactions coupled to a MultiReflection Time-of-Flight MassSpectrometer (MR ToF MS) will be designed and build in order to study neutron-rich heavy nuclei. The new setup will be installed at the AGOR cyclotron facility in Groningen. AGOR is a superconducting K=600 MeV cyclotron for the acceleration of both light and heavy ions.

The aims of the project are the discovery of new isotopes in the transfermium region and to study the fission half-lives of these isotopes. Furthermore, NEXT will give access to the masses of N=126 nuclei and transfermium isotopes.

For the project, we are currently looking for an enthusiastic PhD student. You should have an interest in technical development and building new experimental equipment.

Qualifications

You have interest in setting up a new experiment. Following skills will be beneficial for the position:

• master in physics (or related discipline), preferable a master thesis in

experimental physics

- highly motivated by a challenging project
- interest in ion guide techniques, electromagnetic separators and/or mass spectrometry
- interest in nuclear physics
- good interpersonal skills
- ability to work in a team as well as independently
- good communication skills
- ability to communicate verbally and in written form in English.

Conditions of employment

We offer you in accordance with the Collective Labour Agreement for Dutch Universities:

- a salary of € 2,325 gross per month in the first year, up to a maximum of € 2,972 gross per month in the fourth and final year for a full-time working week
- a full-time position (1.0 FTE) for 4 years
- a holiday allowance of 8% gross annual income
- an 8.3% year-end bonus
- a position for four years; first, you will get a temporary position of one year with the option of renewal for another three years; prolongation of the contract is contingent on sufficient progress in the first year to indicate that a successful completion of the PhD thesis within the contract period is to be expected
- a PhD training programme is part of the agreement and you will be enrolled in the Graduate School of Science and Engineering.

Do you meet our qualification criteria? If yes, your application should include:

- cover letter
- curriculum vitae
- transcripts from your bachelor's and master's degree
- contact information of at least two academic references

You can submit your application until 25 August 11:59p.m. / before 26 August 2019 Dutch local time (CET) by means of the application form (click on "Apply" below on the advertisement on the university website https://www.rug.nl/about-us/work-with-us/job-opportunities/?details=00347-02S00078VP). Candidates are expected to start in October 2019. The positions will be open until filled by suited candidates.

We are an equal opportunity employer and value diversity at our University. We are committed to building a diverse faculty so you are encouraged to apply. Our selection procedure follows the guidelines of the Recruitment code (NVP), https://nvp-plaza.nl/download/?id=7714 and European Commission's European Code of Conduct for recruitment of researchers, https://euraxess.ec.europa.eu/jobs/charter/code

Unsolicited marketing is not appreciated.

Information

For information you can contact:

Julia Even, <u>j.even@rug.nl</u>

Please do not use the e-mail address(es) above for applications.