Faculty of Physics

Warsaw University of Technology

Call for Postdoctoral Position in the Field of Nuclear Theory

Job Description:

Nuclear Theory Group at Warsaw University of Technology invites applications to fill **postdoc position** in the field of nuclear theory. The successful candidate will be working on the theoretical description of **low energy nuclear reactions**. Project is directed towards understanding the role of pairing dynamics in nuclear reactions, in particular those leading to the production of **superheavy elements**. Prospective candidate is expected to pursue studies of **nuclear collisions and fusion** within the framework of the **time-dependent density functional theory**. As a result we expect to gain a comprehensive understanding of nuclear reactions and we will probe the advantages and limitations of the time-dependent DFT description of atomic nuclei. We offer a unique opportunity to work on the most challenging problems related to superfluid dynamics of atomic nuclei. The complexity of the problem poses novel computational challenges. Inevitably, **high performance computing (HPC)** will be the essential part of the research. Presently we use the fastest computing systems available for open science, like LUMI (CSC, Finland), Piz Daint (CSCS, Switzerland), Summit (ORNL, USA) and Tsubame (GSIC Center, Japan). The candidate will also be partly involved in the software development for such systems. The research will be conducted in collaboration with our partners from USA and Japan.
The successful candidate will be employed as a Research Assistant Professor within the project: ***Low energy collisions involving heavy nuclei within Time Dependent Density Functional Theory***. (National Science Center grant), for a minimum period of 12 months, which can be extended to 18 months.

Requirements:

Applicants must have a Ph.D. degree, or foreign equivalent, and a strong record of published research in nuclear theory or condensed matter theory. We are looking for a candidate with knowledge of methods of many body quantum mechanics and possessing programming skills in C or Fortran. Knowledge of MPI or CUDA, as well as experience with supercomputing will be an advantage.

Employment status: Full-time, position starts when a successful candidate is selected but not later than **June 30, 2024.**

Salary: 10 000 PLN per month (before tax).

Application details:

Applications including CV, publication list and research statement should be submitted to ntg@fizyka.pw.edu.pl. Please include the subject 'postdoc' in your email. At least one recommendation letter sent by an external researcher is expected.

Application deadline**:** The process of collecting applications and screening candidates will be continued till successful candidates are selected but not later than **June 1, 2024**.

Please include in your application the following statement: "In accordance with the personal data protection act from the 29th of August 1997, I hereby agree to process and to store my personal data by the Institution for recruitment purposes".

The candidate will be selected according rules of awarding scientific scholars in research projects funded by Polish National Center Science: https://ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2016/uchwala96_2016-zal1.pdf

Contact:

For more information contact Piotr Magierski, email: piotr.magierski@pw.edu.pl

To get more information about **Nuclear Physics Division** (Faculty of Physics, Warsaw University of Technology) and in particular **Nuclear Theory Group** visit: https://nuclearphysics.fizyka.pw.edu.pl/

Notice on protection of personal data:

Pursuant to Article 13 of the Regulation of the European Parliament and of the Council (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directve 95/46/EC (hereinafter referred to as: "GDPR"), we inform you that:

• The Warsaw University of Technology, Pl. Politechniki 1, 00-661 Warszawa, Poland (further referred to as the „University"), is the administrator of your personal data. For further details on personal data processing you can contact the data protection officer: iod@pw.edu.pl

• Personal data of the candidates are processed for the purposes of carrying out the recruitment procedure.

• Members of the relevant recruitment committees are recipients of the personal data of the candidates.

• Personal data of the candidates will be processed until the recruitment procedure is concluded. Access to your personal data may have companies that Warsaw University of Technology commissions to perform actvities that involve the processing of personal data. Your data will be deleted after 6 months.

• The candidates have the right to request from the University access to their personal data and the right to amend them.

• The candidate may at any moment withdraw the consent to process personal data. The data will then be irretrievably and efectively destroyed, so that they can no longer be accessed or reconstructed by any means, and the candidature shall not be further taken into account in the recruitment procedure.

• In any case, the candidate has a right to file complaint to the Inspector General for the Protection of Personal Data, Stawki 2, 00-193 Warszawa, Poland, phone: (+48) 22 531 03 00, fax: (+48) 22 531 03 01, e-mail: kancelaria@giodo.gov.pl