# Call for PhD student in the field of ultracold atomic gases and nuclear theory

### **Job Description:**

The successful candidate will be investigating dynamical properties of strongly interacting fermionic superfluids being far from equilibrium state. In particular, he/she is expected to pursue studies of dynamics of quantum atomic gases (vortex and soliton dynamics, quantum turbulence) and/or dynamics of neutron star interiors, within the framework of the density functional theory, in particular with its time dependent version. Inevitably, high performance computing (HPC) will be essential part of the researches. Presently we use one of the fastest computing systems, like Piz Daint (CSCS, Switzerland), Summit (ORNL, USA) and Tsubame3.0 (GSIC Center, Japan). The candidate will be also partly involved in the software development for such systems. The position assumes also very strong collaboration with our partners from USA and Japan.

The successful candidate will become a team member that executes project: *Investigation of quantum turbulence in strongly correlated Fermi systems* (National Science Center grant). It is expected that the candidate will defend his/her Ph.D. thesis within 4 years.

#### **Requirements:**

Applicants must have a M.Sc. degree, or foreign equivalent, and some experience in condensed matter theory, nuclear theory or quantum optics. We are looking for a candidate with basics knowledge of methods of many body quantum mechanics. Prospective candidate should have an interest in computational methods, and their application to solve physical problems. Knowledge of parallel programming techniques (OpenMP, MPI) or CUDA technology will be an advantage.

Employment status: Full-time, position should start around Aug, 2019 (precise date will be decided together with successful candidate)

Salary: 4,500 PLN per month (untaxed scholarship) + budget for travelings.

### **Application details:**

The applications including CV, publication list and research statement should be submitted to <a href="mailto:ntg@if.pw.edu.pl">ntg@if.pw.edu.pl</a>. Please include the subject 'phd student' in your email. At least one recommendation letter is required (for example send by supervisor of M.Sc. thesis).

Application deadline: June 15, 2019. Latter applications may also be considered.

Please include in your application the following statement: "I hereby give consent to process my personal data included in the offer, for the purposes of the recruitment procedure, in accordance with the Personal Data Protection Act dated 29.08.1997 (Consolidated text: Journal of Laws of the Republic of Poland, 2016, item 922, as amended)".

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 Gabriel Wlazłowski,

email: gabriel.wlazlowski@pw.edu.pl

To get more information about the group profile visit:

http://www.if.pw.edu.pl/~gabrielw/ http://nuclear.fizvka.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 Directive 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 protector officer: iod@pw.edu.pl

# Faculty of Physics

- 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 activities 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 effectively 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