

Call for Postdoctoral position in the field of ultracold atomic gases or nuclear theory

Job Description:

The successful candidate will investigate superfluid dynamics in Fermi systems with dissipation and fluctuations. In particular, he/she is expected to pursue studies focused on the development/construction of a microscopic theoretical framework capable of executing real-time dynamics of superfluid Fermi, including temperature effects. The framework, that utilizes density functional theory concepts, will be applied to ultracold atomic or nuclear systems (neutron stars). The constructed methods will be incorporated into developed by us (open-source) software for simulating ultracold Fermi gases across BCS-BEC crossover ([W-SLDA Toolkit](#)) and its further extension to nuclear systems. Inevitably, high-performance computing (HPC) will be an essential part of the research. The position also assumes strong collaboration with our partners from USA and Japan.

The successful candidate will be employed as a research assistant professor within the project: Superfluid dynamics in Fermi systems with dissipation and fluctuations (Polish National Science Center grant), for a minimum period of 12 months, which can be extended up to 42 months.

Requirements:

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

Employment status:

Full-time position. Start date: middle of 2023 (precise date will be decided together with successful candidate).

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Application details:

The applications, including CV, publication list, and research statement, should be submitted to ntg@fizyka.pw.edu.pl. Please include the subject 'postdoc - Opus23' in your email.

At least one recommendation letter send by an external researcher is expected.

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)".

Application deadline: 15 March 2023

The process of collecting applications and screening candidates will be continued till successful candidate is selected.

Contact:

For more information contact Gabriel Wlazłowski,

email: gabriel.wlazlowski@pw.edu.pl

To get more information about the group and our research visit:

<https://wlazlowski.fizyka.pw.edu.pl>

<https://wsllda.fizyka.pw.edu.pl>

<https://nuclearphysics.fizyka.pw.edu.pl>

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- 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

- 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