



Institute of Physics of the Polish Academy of Sciences

OPEN POSITION



Job ID: #JOB 26/2023

Job Description

Job Title: Postdoc in theoretical physics

Job Summary:

Correlation aspects of quantum integrable models in one dimension.

Job Description:

The project aims at studying interacting quantum systems in one spatial dimension. When allowing interparticle interactions in a described quantum system, there exists a whole family of integrable models that can be solved by Bethe ansatz techniques. An example is the one-dimensional interacting Bose gas, also known as Lieb-Liniger model, where the solution can be evaluated by solving the Bethe equations. Within this framework, it is possible to acquire important knowledge on the system and calculate the desired physical quantities, e.g. correlation functions and the few-body physical processes responsible for their formation.

Keywords: Bethe ansatz, integrability, Yang-Baxter, interacting field theory.

Requirements:

- **research experience:** experience in theoretical quantum mechanics, familiarity with the concepts of integrability in QFT/interacting models is a plus;
- **degree held:** Ph.D. in physics (or PhD thesis submitted), obtained no earlier than 7 years before the beginning of the contract (calculated according to the official rules of NCN, as per the NCN resolution 26/2015 of 12 march 2015.);
- **required skills:** analytical abilities in quantum interacting systems, numerical proficiency for solving mathematical/physics problems is a plus;
- **proficiency in English;**
- **ability to work in a research team**, interact with other members of the group;
- Experience in writing research publications.

Main research field: Physics

Sub Research Field: Quantum field theories, quantum many-body physics

Career Stage: Experienced researcher or 4-10 yrs (Post-Doc)

Research Profile ([details](#)): Recognised Researcher (R2)

Type of Contract: Fixed term for one year (12 months).

Start date: As soon as possible, no later than October 1st.

Status: Full-time

Salary: Approximately 9500 PLN gross per month (before ~ 25% taxes, exact amount depends slightly on applicable social security contributions).

Contact

More information can be obtained from Felipe Taha Sant'Ana (ftaha@ifpan.edu.pl) and/or Piotr Deuar (deuar@ifpan.edu.pl). Website of the project: www.ifpan.edu.pl/~deuar/polonezbis/

Application details

Application deadline: 30.06.2023

Required materials:

- Scientific CV
- Cover/motivation letter
- Scan of Ph.D. diploma (or an explanation of when one is expected)
- list of publications
- Two recommendation letters by an academic
- Consent to process your personal data (expressed on the form attached to this announcement)

All materials should be submitted in electronic form to the addresses:
rekrutacja@ifpan.edu.pl, ftaha@ifpan.edu.pl, and deuar@ifpan.edu.pl, with Job ID in the subject.

DATA PROCESSING UNDER CONSENT FOR THE PURPOSES OF RECRUITMENT

Under Art. 13 sections 1 and 2 of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 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 (General Data Protection Resolution), EU OJ L 119 of 04.05.2016, page 1, as amended, hereinafter referred to as "GDPR", we hereby inform as follows:

1. The Data Controller of the provided personal data is the Institute of Physics of the Polish Academy of Sciences, Al. Lotników 32/46, 02-668 Warsaw, phone (22) 116-2111, e-mail director@ifpan.edu.pl.
2. Contact details to the Data Protection Officer are as follows: e-mail iodo@ifpan.edu.pl
3. Your personal data shall be processed for the purpose of carrying out the recruitment process for the position of POST-DOC.
4. Processing of your personal data in scope of: full name, date of birth, correspondence address, information about education and course of past employment shall take place under Art. 22¹ § 1 of the Act of 26 June 1974 - Labour Code. In the scope in which you sent to us more personal data than indicated above, we process your data under the consent granted by you.
5. Your personal data shall be stored for 1 month from completion of the recruitment process. If you grant consent for processing of personal data for future recruitments, we shall process your data until withdrawal of the consent by you, however, no longer than for the period of 6 months from the day of submittal of the application by you.
6. Provision of the abovementioned data in the scope indicated above is a statutory requirement resulting from Art. 22¹ § 1 of the Act of 26 June 1974 - Labour Code, in the remaining scope it is voluntary. Failure to provide the data referred to in Art. 22¹ § 1 of the Act of 26 June 1974 - Labour Code precludes consideration of your candidacy for the offered position.
7. You have the right to access your personal data, to rectify them, erase them, restrict their processing.
8. You may submit a complaint to the Inspector General for the Protection of Personal Data.
9. You have the right to withdraw the consent to process your personal data in the scope in which they were provided at any time. Withdrawing the consent does not affect the lawfulness of processing carried out on the basis of consent before its withdrawal.

Consent content:

I grant my consent to the Institute of Physics of the Polish Academy of Sciences to process my personal data contained in the sent recruitment documents for the purpose of carrying out the recruitment process for the position of POST_DOC.

If you want us to consider your candidacy also in the future recruitment processes, please grant the additional consent:

I grant my consent to the Institute of Physics of the Polish Academy of Sciences to process my personal data contained in the sent recruitment documents in future recruitment processes taking place during 6 months from the day of appearance of this job advertisement.