Joint Institute for Nuclear Research

International Intergovernmental Organization

SCIENCE BRINGS NATIONS TOGETHER

Postdoctoral Programme in Accelerator Physics

12-month contract, renewable for another max. 24 months

Your mission

A mega-science project "NICA Complex" is being implemented at JINR to construct and operate a complex of superconducting rings for colliding beams of heavy ions. The main task is to study hot and dense strongly interacting baryonic matter, as well as to search for a mixed phase and a critical point in the QCD phase diagram. The successful candidate for this position will actively participate in the technological launch of the complex, followed by registration of the first collisions of ions in colliding beams, and then its commissioning and operation to provide ion beams for physical experiments.

Your tasks

You will work in the Accelerator division at Veksler and Baldin Laboratory of High Energy Physics. Your research programme will focus on:

- Optimization of the impedances of the Collider beam chamber and its elements.
- Analysis of the associated instabilities of the ion beam.
- Expert assessment of the proposed technical solutions of the project.

Constraints and risks

The candidate is expected to go on international business trips for periods of 1 to 4 weeks. Work in shifts and work on the weekends may be necessary, remote work is allowed. The work will be carried out at the accelerator facilities, while the necessary authorizations will be issued following an annual medical examination arranged by the employer.

Depending on your citizenship, you may need to obtain a visa and this process can last several months. JINR offers all the necessary support for obtaining the entry permit for the Russian Federation.

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Your profile

- Highly motivated candidate with a PhD (obtained less than 5 years ago) in physics, accelerator physics, or in a similar field.
- Age under 40, have not had more than 3 temporary positions.
- Strong background in experimental physics or accelerator operation is a prerequisite. Experience in developing focusing systems for accelerators and devices for suppressing particle motion is highly desirable.
- As an international intergovernmental research organization, we are particularly keen to ensure that we also attract applicants from outside of Russia. You must have good knowledge of English and be willing to learn Russian (a language course will be provided by JINR).

What we offer

High quality of life

Called the "Island of Stability", the city of Dubna is ideally located on the bank of Europe's largest waterway — the Volga River (only 2.5 hours from Moscow by train or bus and 1.5 hours by car from Sheremetyevo International Airport). It is important for us that our employees quickly and easily adapt to the new living conditions and have a healthy work-life balance. Therefore, we offer accommodation in comfortable guest-house rooms (for singles), or fully furnished flats owned by JINR, and annual paid leave.

Prospects

We guarantee you a **12-months postdoctoral contract, renewable for another max. 24 months (36 month in total)**, in a multicultural scientific environment.

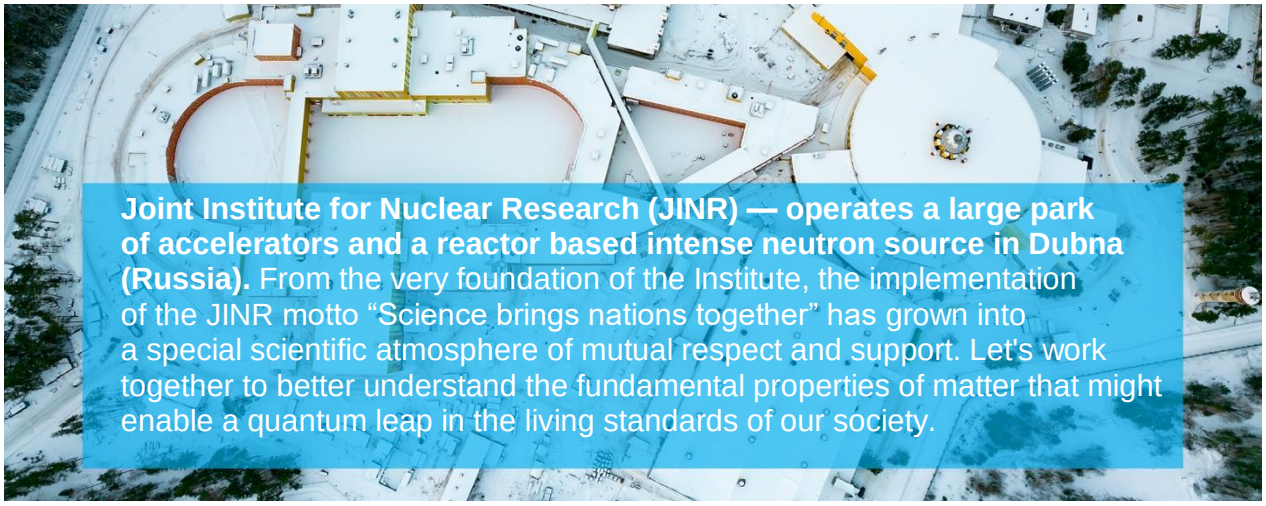
Remuneration

2300 USD per month, paid in Russian rubles at the planned exchange rate (forecasted year-average), which is adopted with the JINR budget for the current year. In 2023, the exchange rate is 69.2 Russian rubles per 1 USD.
Income tax of 13% is applied. The employer shall pay no pension insurance.

Benefits

We offer generous social benefits (settling-in allowance, free health insurance for you and your family members), relocation assistance (under certain conditions), free school or kindergarten attendance for children. We also offer free language courses and subsidies for the use of JINR sports infrastructure (Olympic swimming pool, stadium, gym, etc.), as well as access to a variety of cultural activities.

Apply now



Joint Institute for Nuclear Research (JINR) — operates a large park of accelerators and a reactor based intense neutron source in Dubna (Russia). From the very foundation of the Institute, the implementation of the JINR motto “Science brings nations together” has grown into a special scientific atmosphere of mutual respect and support. Let's work together to better understand the fundamental properties of matter that might enable a quantum leap in the living standards of our society.

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