



Offer #2024-07620

Post-Doctoral Research Visit F/M Post-doctoral in the semantics of quantum computation and graphical languages

Contract type : Fixed-term contract

Renewable contract : Yes

Level of qualifications required : PhD or equivalent

Fonction : Post-Doctoral Research Visit

About the research centre or Inria department

The Inria Saclay-Île-de-France Research Centre was established in 2008. It has developed as part of the Saclay site in partnership with **Paris-Saclay University** and with the **Institut Polytechnique de Paris**.

The centre has [40 project teams](#), 32 of which operate jointly with Paris-Saclay University and the Institut Polytechnique de Paris; Its activities occupy over 600 people, scientists and research and innovation support staff, including 44 different nationalities.

Context

As part of a national project on quantum computing, the aim is to develop a model for quantum computing, using graphical and categorical structures in particular.

Travel is financed by the project.

Assignment

Assignments :

With the help of Renaud Vilmard and Vladimir Zamdzhiev, the recruited person will be taken to develop a graphical and categorical framework for quantum computation.

For a better knowledge of the proposed research subject :

A state of the art, bibliography and scientific references are available at the following URL, do not hesitate to log in: <https://lmf.cnrs.fr/Research/Quan>

Main activities

Main activities:

- Perform research
- Write publications
- Present research at seminars and colloquia

Additional activities:

- Attend seminars
- Participate in the team's activities.

Benefits package

- Subsidized meals
- Partial reimbursement of public transport costs
- Leave: 7 weeks of annual leave + 10 extra days off due to RTT (statutory reduction in working hours) + possibility of exceptional leave (sick children, moving home, etc.)
- Possibility of teleworking (after 6 months of employment) and flexible organization of working hours
- Professional equipment available (videoconferencing, loan of computer equipment, etc.)
- Social, cultural and sports events and activities

- Access to vocational training
- Social security coverage

General Information

- **Theme/Domain** : Proofs and Verification
Software engineering (BAP E)
- **Town/city** : Palaiseau
- **Inria Center** : [Centre Inria de Saclay](#)
- **Starting date** : 2024-12-01
- **Duration of contract** : 12 months
- **Deadline to apply** : 2024-11-30

Contacts

- **Inria Team** : [QUACS](#) (DRH)
- **Recruiter** :
Arrighi Pablo / pablo.arrighi@inria.fr

About Inria

Inria is the French national research institute dedicated to digital science and technology. It employs 2,600 people. Its 200 agile project teams, generally run jointly with academic partners, include more than 3,500 scientists and engineers working to meet the challenges of digital technology, often at the interface with other disciplines. The Institute also employs numerous talents in over forty different professions. 900 research support staff contribute to the preparation and development of scientific and entrepreneurial projects that have a worldwide impact.

The keys to success

- Advanced knowledge in quantum computation and graphical languages
- Good Communication and Presentation Skills
- Experience in Writing Academic Papers

Warning : you must enter your e-mail address in order to save your application to Inria. Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.

Instruction to apply

Defence Security :

This position is likely to be situated in a restricted area (ZRR), as defined in Decree No. 2011-1425 relating to the protection of national scientific and technical potential (PPST). Authorisation to enter an area is granted by the director of the unit, following a favourable Ministerial decision, as defined in the decree of 3 July 2012 relating to the PPST. An unfavourable Ministerial decision in respect of a position situated in a ZRR would result in the cancellation of the appointment.

Recruitment Policy :

As part of its diversity policy, all Inria positions are accessible to people with disabilities.