



Offre n°2025-08869

Post-Doctoral Research Visit F/M Entanglement of Quantum states via moments and tensor analysis

Type de contrat : Fixed-term contract

Niveau de diplôme exigé : PhD or equivalent

Fonction : Post-Doctoral Research Visit

Niveau d'expérience souhaité : Recently graduated

A propos du centre ou de la direction fonctionnelle

The Inria centre at Université Côte d'Azur includes 42 research teams and 9 support services. The centre's staff (about 500 people) is made up of scientists of different nationalities, engineers, technicians and administrative staff. The teams are mainly located on the university campuses of Sophia Antipolis and Nice as well as Montpellier, in close collaboration with research and higher education laboratories and establishments (Université Côte d'Azur, CNRS, INRAE, INSERM ...), but also with the regional economic players.

With a presence in the fields of computational neuroscience and biology, data science and modeling, software engineering and certification, as well as collaborative robotics, the Inria Centre at Université Côte d'Azur is a major player in terms of scientific excellence through its results and collaborations at both European and international levels.

Contexte et atouts du poste

Every year Inria International Relations Department has a few postdoctoral positions in order to support Inria international collaborations.

The postdoctoral contract will have a duration of 12 to 24 months. The default start date is November 1st, 2025 and not later than January, 1st 2026. The postdoctoral fellow will be recruited by one of the Inria Centres in France but it is recommended that the time is shared between France and the partner's country (please note that the postdoctoral fellow has to start his/her contract being in France and that the visits have to respect Inria rules for missions).

Mission confiée

Candidates for postdoctoral positions are recruited **after the end of their Ph.D. or after a first post-doctoral period**: for the candidates who obtained their PhD in the Northern hemisphere, **the date of the Ph.D. defense shall be later than September 1, 2022**; in the Southern hemisphere, **later than April 1, 2022**.

In order to encourage mobility, the postdoctoral position must take place in a scientific environment that is truly different from the one of the Ph.D. (and, if applicable, from the position held since the Ph.D.); particular attention is thus paid to French or international candidates who obtained their doctorate abroad

For a better knowledge of the proposed research subject :

A state of the art, bibliography and scientific references are available at the following URL:https://www-sop.inria.fr/members/Bernard.Mourrain/announces/25.04.Post_Doc_Inria_CWI_tex.pdf

Collaboration :

The recruited person will be in connection with

- Bernard Mourrain, scientific leader of Aromath team, Centre Inria d'Université Côte d'Azur, 2004 route des Lucioles, 06902 Sophia Antipolis, France and
- Monique Laurent, CWI Fellow, senior researcher at CWI, Networks and Optimization research group, CWI, Science Park 123, 1098 XG Amsterdam, The Netherlands.

She or he will be interacting with Marc-Olivier Renou (Junior Professor Chair at Inria Saclay in the team PhiQus) expert in Quantum Information and theoretical physics.

Principales activités

- Analyse the requirements of the subject
- Propose new solutions for the problems described in the work proposal.
- Write reports and papers.
- Write prototype code
- Present the works' progress to partners, scientific community, ..

Compétences

Technical skills and level required : good competencies in Geometry and Optimization. Skills in Tensor modeling and Quantum information are a plus.

Languages : english

Relational skills : good contact, willing to communicate.

Other valued appreciated : curiosity, imagination

Avantages

- 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

Rémunération

Contract duration : 12 to 24 months

Rémunérating : 2 927€ gross/month

Informations générales

- **Thème/Domaine** : Algorithmics, Computer Algebra and Cryptology
Scientific computing (BAP E)
- **Ville** : Sophia Antipolis
- **Centre Inria** : [Centre Inria d'Université Côte d'Azur](#)
- **Date de prise de fonction souhaitée** : 2025-11-01
- **Durée de contrat** : 2 years
- **Date limite pour postuler** : 2025-05-29

Contacts

- **Équipe Inria** : [AROMATH](#)
- **Recruteur** :
Mourrain Bernard / Bernard.Mourrain@inria.fr

A propos d'Inria

Inria est l'institut national de recherche dédié aux sciences et technologies du numérique. Il emploie 2600 personnes. Ses 215 équipes-projets agiles, en général communes avec des partenaires académiques, impliquent plus de 3900 scientifiques pour relever les défis du numérique, souvent à l'interface d'autres disciplines. L'institut fait appel à de nombreux talents dans plus d'une quarantaine de métiers différents. 900 personnels d'appui à la recherche et à l'innovation contribuent à faire émerger et grandir des projets scientifiques ou entrepreneuriaux qui impactent le monde. Inria travaille avec de nombreuses entreprises et a accompagné la création de plus de 200 start-up. L'institut s'efforce ainsi de répondre aux enjeux de la transformation numérique de la science, de la société et de l'économie.

L'essentiel pour réussir

- interest to dive in new topics
- ability to investigate different domains
- aptence for symbolic, numeric and effective methods

- cross-disciplinary knowledge in geometry, optimization, quantum information.

Attention: Les candidatures doivent être déposées en ligne sur le site Inria. Le traitement des candidatures adressées par d'autres canaux n'est pas garanti.

Consignes pour postuler

Sécurité défense :

Ce poste est susceptible d'être affecté dans une zone à régime restrictif (ZRR), telle que définie dans le décret n°2011-1425 relatif à la protection du potentiel scientifique et technique de la nation (PPST). L'autorisation d'accès à une zone est délivrée par le chef d'établissement, après avis ministériel favorable, tel que défini dans l'arrêté du 03 juillet 2012, relatif à la PPST. Un avis ministériel défavorable pour un poste affecté dans une ZRR aurait pour conséquence l'annulation du recrutement.

Politique de recrutement :

Dans le cadre de sa politique diversité, tous les postes Inria sont accessibles aux personnes en situation de handicap.