

2018-00878 - PhD Position F/M PhD students on "stochastic processes and modeling of large networks" ERC Advanced NEMO project

Contract type : Public service fixed-term contract
Level of qualifications required : Graduate degree or equivalent
Fonction : PhD Position

Context

Inria promotes "scientific excellence in the service of technology transfer and society". Inria employs 2700 people from the world's leading universities to tackle the challenges of computer science and mathematics. His open model allows him to explore original paths with his industrial and academic partners. Inria is at the origin of many innovations creating value and jobs. The position will be attached to the INRIA center in Paris (<https://www.inria.fr/en/centre/paris>) and more specifically to the DYOGENE research team.

NEMO, NETWORK MOTION, is an inter-disciplinary ERC project centered on network dynamics. The inter-disciplinarity spans from communication engineering to mathematics, with an innovative interplay between the two.

NEMO's focus is on stochastic geometry. NEMO's aim is to introduce dynamics in wireless stochastic geometry. The aim is to have, through these dynamical versions, the same academic and industrial impact on wireless networks as static stochastic geometry has today.

NEMO will leverage structural interactions of INRIA with Ecole Normale Supérieure on the mathematical side, and with Nokia Bell Labs and Orange on the engineering side.

This will create in Europe a group focused on this mathematicscommunication engineering interface, and to become the top innovation group of the field worldwide.

Web site for additional job details

<https://www.inria.fr/en/centre/paris/news/francois-baccelli-winner-of-an-erc-...>

Assignment

The three PhD students will contribute to the research activities of the ERC Nemo project on the following topics: stochastic processes, random graphs, stochastic geometry, point processes, modeling of large networks and more generally to participate in all the scientific activities of the ERC research group.

Main activities

- Contribute to research work on the topics listed above.
- Participate in the animation of the scientific life of the research group ERC (organization of seminars, working groups and reading).

Skills

Solides bases mathématiques sur les processus stochastiques et/ou la modélisation des grands réseaux.

Benefits package

- Subsidised catering service
- Partially-reimbursed public transport

Remuneration

- Duration: 36 months
- Targeted hiring date: 01/01/2019
- Location: Paris
- Gross Salary per month: 1982 €

General Information

- **Theme/Domain :** Networks and Telecommunications
System & Networks (BAP E)
- **Town/city :** Paris
- **Inria Center :** CRI de Paris
- **Starting date :** 2019-01-01
- **Duration of contract :** 3 years
- **Deadline to apply :** 2019-06-30

Contacts

- **Inria Team :** DYOGENE
- **PhD Supervisor :**
Baccelli François / francois.baccelli@inria.fr

About Inria

Inria, the French national research institute for the digital sciences, promotes scientific excellence and technology transfer to maximise its impact. It employs 2,400 people. Its 200 agile project teams, generally with academic partners, involve more than 3,000 scientists in meeting the challenges of computer science and mathematics, often at the interface of other disciplines. Inria works with many companies and has assisted in the creation of over 160 startups. It strives to meet the challenges of the digital transformation of science, society and the economy.

Instruction to apply

3 positions :

- PhD1 starting date: January 2019, for 36 months.
- PhD2 starting date: January 2020, for 36 months.
- PhD3 starting date: January 2021, for 36 months.

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.

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.