



**Offer #2024-07129**

## **PhD Position F/M Modeling of large communication networks**

**Contract type** : Fixed-term contract

**Level of qualifications required** : Graduate degree or equivalent

**Fonction** : PhD Position

### **Context**

The position is funded by the national program on communication networks (PEPR réseaux du Futur, <https://www.entreprises.gouv.fr/fr/actualites/france-2030-lancement-du-programme-reseaux-du-futur-et-de-france-6g>). The research will be conducted at INRIA and Télécom Paris in LINCS, a joint laboratory on communication networks.

Here are links to the relevant laboratories:

DYOGENE: <https://www.inria.fr/fr/dyogene>

Télécom Paris : <https://www.telecom-paris.fr/fr/lecole/departements-enseignement-recherche/informatique-reseaux>

LINCS: <https://www.lincs.fr/>

### **Assignment**

Conduct research in collaboration with the researchers in the listed laboratories.

### **Main activities**

Publish in IEEE and ACM journals and/or in applied mathematics journals.

### **Skills**

The research will be focused on the modeling of large wireless communication networks.

### **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 and flexible organization of working hours (after 12 months of employment)
- 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** : Networks and Telecommunications  
System & Networks (BAP E)
- **Town/city** : Paris
- **Inria Center** : [Centre Inria de Paris](#)
- **Starting date** : 2024-09-01
- **Duration of contract** : 3 years
- **Deadline to apply** : 2024-05-31

## Contacts

- Inria Team : [DYOGENE](#)
- PhD Supervisor :  
Baccelli François / [Francois.Baccelli@inria.fr](mailto:Francois.Baccelli@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

We will particularly welcome candidates with a genuine interest in communication networks of the future, for instance:

- \* Cellular networks
- \* Non terrestrial communication networks, in particular low orbit constellation based networks
- \* Joint communication and sensing
- \* Satisfaction of real time constraints

as well as candidates with a genuine interest in stochastic modeling, for instance:

- \* Queueing theory
- \* Point processes
- \* Stochastic geometry

**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.