**2018-00878 - Doctorant "processus stochastiques et modélisation des grands réseaux" ERC Advanced projet NEMO**

**Context**

Inria promotes "scientific excellence in the service of technology transfer and society." Inria employs 2,700 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.

**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 €