



Call for application

Assistant-Professor in Mathematics Specialty Probability and Statistics (W/M)

Localisation:	IMT Lille Douai, Site de Lille, Cité scientifique, Rue Guglielmo Marconi, 59650 Villeneuve-d'Ascq, FRANCE
Entity/Service:	IMT Lille Douai, Lille buildings / Scientific Fundamentals Education Department
Position of supervisor:	Head of Scientific Fundamentals Education Department
Contract type	Permanent contract

1. CONTEXT

1.1 IMT Presentation

Institut Mines-Télécom is a public institution dedicated to higher education and research for innovation in the fields of engineering and digital technology. Always tuned in to the economic world, it combines high academic and scientific legitimacy with a concrete presence alongside companies and a unique focus on the major transformations of the 21st century: digital technologies, the environment and energy, industry and education. Its training and research for innovation are conducted in the Mines and Télécom Graduate Schools under the supervision of the Minister for Industry and Electronic Communications, in two subsidiaries and in institutions that are associate partners or under contract. Institut Mines-Télécom is a founding member of the Industry of the Future Alliance. It has two Carnot labels for the quality of its research partnerships. Every year, around seventy startup companies leave its incubators.

1.2 School Presentation

Created by the merger of Mines Douai and Telecom Lille on January 1st, 2017, IMT Lille Douai is one of the largest graduate schools of engineering, north of Paris. It aims at training engineers and scientists of the future, with both industrial expertise and strong skills in digital technologies. Strategically located at the crossroad of Europe, one hour from Paris, one hour and a half from London and thirty minutes from Brussels, IMT Lille Douai intends to become a major player in industrial, digital and environmental transformations of the 21st century. Therefore, our school is building bridges between education, research, engineering and digital science.

Public establishment belonging to IMT (Institut Mines-Télécom), placed under the supervision of the Ministry of Industry, IMT Lille Douai has three main objectives: providing our students with ethically responsible engineering practice enabling them to solve 21st century issues, carrying out our R&D activities leading to outstanding innovations and supporting territorial development through innovation and entrepreneurship.



Located on two main campuses dedicated to research and education in Douai and Lille, IMT Lille Douai offers research facilities of almost 20,000m² in the following areas:

- Digital science
- Processes for industry and services
- Energy and Environment
- Process and Materials engineering applied to polymers, composites and civil engineering

For more information, see: www.imt-lille-douai.fr

1.3 Working environment

IMT Lille-Douai aims at strengthening its Scientific Fundamentals Education Department both in education and research. Our school is also willing to develop cross-cutting activities in order to build bridges with other IMTLD Research and Innovation Centers (CERI) and remain in synch with the areas of excellence of our school and of Institute Mines-Télécom. The central axes of the department are based on maths, physics and electronics, mainly during the first three years of the curriculum. The department is also involved in probabilities and statistical research. The successful candidate will evolve within a team consisting of 16 teachers-researchers, including 4 in mathematics.

The selection committee will pay specific attention to cross-cutting proposals allowing the connection between the different Centers and Departments.

The required missions of the successful lecturer / assistant professor position candidate are described below.

2. MISSIONS AND ACTIVITIES

2.1 Missions

Under the guidance of the Head of Scientific Fundamentals Education Department, the successful candidate will actively contribute to the teaching and research efforts of the Department.

2.2 Activities

Teaching Missions and responsibilities :

- Significant contribution to the delivery of teaching programs (courses, tutorials, practical works) of undergraduate and graduate students in his/her field of expertise (analysis, algebra, statistics and probabilities). Some lectures can be delivered in English.
- Implement and engage innovative educational methods.
- Participate in pedagogical supervision (projects, internships, competition juries...).

Research and technology-transfer Missions:

- Work effectively with other academics and supervise master/PhD students and post-docs in the domain of statistics and probability.
- Initiate cross-cutting research with other IMTLD teams in information theory, signal and data processing or numerical integration. In this respect the selected candidate will be in charge of developing new probabilistic models to accurately describe the data and establish appropriate statistical inference methods.



- Prepare the French diploma Accreditation to Supervise Research (“Habilitation à Diriger des Recherches (HDR)” in French).
- Implement contractual research and incentive actions and facilitate knowledge transfer in partnership with economic actors.
- Participate to the activities of regional, national and international scientific groups and organize scientific events.
- Produce high quality scientific outputs: peer-review papers, patents, etc.
- Undertake a scientific watch.
- Attend working and discussion groups, international and national events (seminars, congresses...)

3. TRAINING AND SKILLS

3.1 Training

The candidate must hold a PhD degree in probability or statistics. This position is open to a candidate interested in teaching and research oriented towards information theory, signal processing, numerical integration applied to industrial issues. Work experience of post-doctoral research and of project management will be highly appreciated and substantial record of research output in high quality outlets, will be highly desirable. The candidate should show cultural awareness and an aptitude for multi-disciplinary projects.

3.2 Skills

The successful candidate must have strong scientific background and technical skills, allowing her/him to carry out the aforementioned missions.

She/He should:

- have solid scientific and technological background and significant experience in the analysis of probabilistic and statistical models. The candidate is expected to have preceding multidisciplinary collaborations in the thematic areas of IMTLD. Furthermore, Knowledges in partial differential equations, such as those used by the research teams (e.g. reaction diffusion, hydrodynamics, heat propagation equation...) would be appreciated.
- possess solid skills in programming (Matlab, R, Python...), numerical simulation and numerical statistics whatever his/her own specialization field is.
- have very good communication and teamwork skills.
- strong teaching experience is mandatory.
- Have a good command of English (both oral and written) and good communication and negotiation skills in order to:
 - demonstrate a marked integration into the international community, justify linguistic and cultural abilities to develop international training and research projects.
 - deliver online internet courses (MOOCS in English).



4. OTHER INFORMATION AND HOW TO APPLY

The administrative residence is located in Lille but teaching delivering will be done in both main locations.

Eligibility Conditions: European Nationality Holders (European Union) at the candidature submission date and possessed of a PhD degree.

Application Deadline: April 30th, 2020

Contact persons:

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To apply:

Required documents can be obtained by contacting
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