Grenoble INP-UGA is a renowned public institution of higher education and research, and a major player in the Grenoble ecosystem. It is the engineering and management institute of Grenoble Alpes University, and plays a leading role in the scientific and industrial community.

### Associate Professor Position

<table>
<thead>
<tr>
<th>Short Profile</th>
<th>Numerical Probability – Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Position N°</td>
<td>26 MCF 0610</td>
</tr>
<tr>
<td>CNU Section</td>
<td>26</td>
</tr>
<tr>
<td>Site</td>
<td>Grenoble</td>
</tr>
<tr>
<td>Start by</td>
<td>01/09/2022</td>
</tr>
<tr>
<td>Key words</td>
<td>Applied probability, numerical methods, financial mathematics</td>
</tr>
</tbody>
</table>

Grenoble INP – UGA is a university recognized for its academic and research excellence through obtaining the French label “Initiative d'excellence”. It offers innovative engineering and management programs, with an increasing internationalization of its course offers. The courses are grounded in sound scientific knowledge and linked to digital, industrial, organizational, environmental and energy transitions. The school constitutes the institute of engineering and management for Grenoble Alpes University, with its 1300 staff members (teacher-researchers, lecturers, administrative and technical staff) and 9000 students. It located on 8 sites (Grenoble INP - Ense3, Grenoble INP - Ensimag, Grenoble INP - Esisar, Grenoble INP - Génie industriel GI, Grenoble INP - Pagora, Grenoble INP - Phelma, Polytech Grenoble, Grenoble IAE and the INP Prepa). Grenoble INP is also a highly-ranked institution of higher education and research, leading the way in the fields of engineering and management on an international scale. It is a member of a large number of international academic and research networks. It is part of the European University UNITE!.

As part of Grenoble Alpes University, Grenoble INP has associated guardianship of 40 national and international research laboratories and of technological platforms. The research conducted there benefits both its socio-economic partners and its students. Grenoble INP is at the heart of the following scientific fields: physics, energy, mechanics and materials science, digital science; micro and nano-electronics, on-board systems; industry of the future, production systems, environmental science and management.

Grenoble INP - UGA is an equal opportunity employer committed to sustainability. Grenoble INP-UGA celebrates diversity and equity and is committed to creating an inclusive environment for all employees. All qualified applications will be considered without discrimination of any kind.
Teaching

School: Grenoble INP - Ensimag
School Website: [http://ensimag.grenoble-inp.fr/](http://ensimag.grenoble-inp.fr/)
Contacts: jean-louis.roch@grenoble-inp.fr, christophe.rippert@grenoble-inp.fr

Grenoble INP-Ensimag is a leading French school in the digital field. It provides high quality theoretical and technological courses in computer science and applied mathematics. It prepares students for careers as digital engineers in many sectors such as information systems, finance, embedded systems, networks, and all industries for design and decision support tools.

Teaching profile:
This position is part of a teaching project at Grenoble INP Ensimag, a reference school for digital technology, where there is a strong need for facilitation and teaching in probability and statistics. For 30 years, Grenoble INP Ensimag has been offering a training program in Engineering for Finance, which has become a reference in the largest financial institutions. This program is very popular and has attracted very good students in mathematics and computer science to Grenoble.

Within this program, teaching needs are very important in the second and third years of the school. The successful candidate will be able to teach applied probability and financial mathematics together with a comprehensive knowledge of stochastic processes (Markov chains, stochastic calculus) and numerical methods (Monte-Carlo methods, statistical learning). Knowledge in programming and software design is essential. The candidate should also be involved in the first and second year core courses in probability and statistics for which the teaching needs are also important.

The core curriculum provides a sound basis for our engineering students, acknowledged by our industrial and research partners, which enables them to specialize while remaining adaptive and generalists. The person recruited could be asked to design courses at the crossroads of mathematics and computer science and to take on teaching responsibilities.

In collaboration with the teaching teams in place, he/she will have to be involved in the setting up of project-based teaching and training through digital technology.

Grenoble INP-Ensimag seeks to train all of its students in responsible and ecologically efficient digital technology; we expect these aspects to be taken into account in the curriculum, particularly with regard to ethical aspects.

Research

Host Laboratory: LJK (UMR 5224 Grenoble INP - UGA, UGA et CNRS)
Lab’s Website: [https://www-ljk.imag.fr/](https://www-ljk.imag.fr/)
Contacts: jean-guillaume.dumas@univ-grenoble-alpes.fr

The Jean Kuntzmann Laboratory (LJK) is a research laboratory in applied mathematics and computer science that brings together teams of probabilists-statisticians, specialists in image and vision processing, and specialists in scientific computing.

Thanks to this multidisciplinarity, it is a rich structure in terms of research themes but also in terms of human resources. This diversity is what keeps the LJK dynamic and the fundamental challenge for its management is to maintain this emulation through a policy of cohesion within the structure.
The LJK sustains strong links with companies, in particular through the MaiMoSiNE and AMIES structures.

Research profile:

The DATA department of the LJK is seeking to further its focus on applied and numerical probabilities. We are seeking to recruit a specialist capable of developing different themes in this field (numerical Monte Carlo methods, stochastic optimization, stochastic dynamical systems, stochastic modeling, mean field, financial mathematics).

The candidate will also contribute to strengthen the cooperation of the LJK with the scientific community of Grenoble. He or she will play an active role in academic and industrial projects on these promising themes and will be able to meet the demands for innovation from the Grenoble industrial sector.

Position assigned in a restricted area: NO

(Protection of the nation's scientific and technical potential, requiring the authorization of the Defense Security Officer for the appointment of the teacher-researcher).

Specific Requirements or Conditions

The administrative tasks related to the position of professor: responsibilities of teaching or research units, responsibilities of programs or years.

How to apply

Applications must be submitted on the Galaxie platform of the Ministry of Higher Education and Research between Thursday, February 24, 2022, 10:00 a.m. (Paris time) and Thursday, March 31, 2022, 4:00 p.m. (Paris time), the closing date.

Any submission received outside the Galaxie platform will not be taken into account.

When the selection committee interviews the candidates, they will be asked to take part in a professional teaching situation; the details will be communicated when the invitation is sent out. In addition, part of the interview may be conducted in English.