

# PhD student position at the Institute of Finance and the Euler Institute, Faculty of Economics at USI Università della Svizzera italiana

Università della Svizzera italiana (USI) is a young and lively university, a hub of opportunity open to the world where students are offered a quality interdisciplinary education in which they can be fully engaged and take center stage, and where our researchers can count on having the space to freely pursue their initiative.

Established in 1996, USI is in constant evolution, always taking on new challenges while remaining true to its three guiding principles: quality, openness and responsibility.

The Institute of Finance provides a lively and academically stimulating environment for aspiring scholars. It accommodates Professors Patrick Gagliardini, Lorian Mancini and Paul Schneider working on quantitative methods in (financial) economics, econometrics, and statistics. The Euler Institute accommodates Professor Michael Multerer, working on computational mathematics.

The Institute invites applications for a research and teaching PhD position (100%, 4-5 years). The PhD candidate will develop his or her dissertation project within the field of Financial Econometrics/Statistics/Machine learning. The successful candidate will work within, or surrounding the SNSF projects *MaxEnt-Fin: computational maximum entropy approach to high-dimensional modeling and analysis in finance*, as well as *Large-scale kernel methods in financial economics*.

## The Ph.D. Position

The doctoral student will be enrolled in the program in Econometrics & Statistics within the Faculty of Economics. The doctoral student will work under the scientific supervision of Prof. Patrick Gagliardini (<http://usi.to/dtj>) and Paul Schneider (<http://usi.to/p96>), respectively Michael Multerer (<http://usi.to/3ps>) and Paul Schneider. The successful candidate will be offered the possibility to work in a dynamic research team and in a multidisciplinary and international scientific environment.

The PhD candidate will collaborate to the development of the institute research agenda. He or she will have the task of setting up a collection of data for his or her dissertation, while at the same time participating in a variety of tasks related to the research streams in which he/she is involved.

On the teaching side, he/she will work as teaching assistant in courses at either bachelor or master level, helping in the preparation of teaching materials and tutoring students.

The PhD candidate is also asked to present papers at scientific conferences, and produce publications for scientific journals.

### **Candidates' profile**

Ideal candidates should satisfy the following requirements:

- A Master (or equivalent title) in Applied Mathematics/Statistics/Theoretical physics, or related disciplines.
- High personal interest in mathematical methods.
- Expertise in programming in Python/R and ideally C++
- Good skills in oral and written English (official language of the Ph.D. program)
- Ability to work independently and to plan and direct own work
- Motivation to engage in the elaboration of a PhD dissertation. Ability to work in team and autonomy in scheduling research steps. Interest for teaching and tutoring students and availability to collaborate with colleagues (engage in scientific dialogue, listen and think critically) are required.

### **Contract terms**

Admission to the Ph.D. program is highly competitive. Admission decisions are based on the candidate's background, interests, attitude and potential for academic achievement.

Successful enrolment in the Ph.D. program and the position as doctoral researcher are not compatible with a further professional activity.

The position is internally financed and the salary levels correspond to those set by the Swiss National Science Foundation for PhD researchers.

The successful candidates will work as research assistants, and will have the possibility to interact with an international network of collaborators.

Workplace is USI Università della Svizzera italiana, located in Lugano, Switzerland. Availability to travel to other parts of Switzerland and abroad (for purposes of collaboration and research) is required.

Starting date is 01.09.2025 (at the earliest). However, the position will be kept open until a suitable candidate has been found.

### **The Application**

Applications may be submitted upon acceptance of the Applicant Personal Data Processing Notice found at the following **LINK**. In the online form, you will be asked to declare that you have read and understood our privacy policy.

Applications should contain: (1) a letter in which the applicants describe their research interests and the motivation to apply, (2) a complete CV, (3) copies of relevant diplomas, certificates as well as the full transcript of records that prove the candidates' eligibility for doctoral studies in Econometrics & Statistics, (4) an electronic version of a research work (Master thesis or other scientific publication).

The latter must be accompanied by a short summary in English (1 page maximum). A support letter written by the Master thesis supervisor (or another Professor who knows the candidate well) is equally welcome.

Applications must be submitted **ONLINE** by filling out the form accessible through the following link: **APPLY**. You will also need to upload the documents listed above.

Requests for further information to Prof. Paul Schneider (paul.schneider@usi.ch).

Applications received before 01.03.2025, will be given priority. However, applications will be received until the position is filled.

USI strives to be an equal opportunity and family friendly employer and is further responsive to the needs of dual career couples. We guarantee that the selection process will give equal opportunities to female and male researchers.

As an institution that values diversity, USI particularly encourages applications from women and from all individuals from underrepresented groups.

Lugano, 24.02.2025