PhD position in Statistics/Machine Learning on spatio-temporal Hawkes processes and their applications

- Institution: Faculty of Informatics at Universita della Svizzera Italiana (USI), Lugano, Switzerland
- **Application Deadline: 14 March 2025**

Project overview

We invite applications for a fully-funded Ph.D. position for conducting methodological research in the field of spatiotemporal point processes. Point processes such as Hawkes processes have been widely used to model events in various domains such as finance, epidemiology, social network analysis, and neuroscience. The methods will be applied to real-world innovative datasets

The future student will be enrolled in the Ph.D. program in Computational Science at USI (gross annual salary: 48,000-51,000 CHF), supervised by Prof. Deborah Sulem and co-supervised by Prof. Xenia Miscouridou (University of Cyprus and Imperial College London).

Candidate profile

To be considered for this project, the candidate needs to:

- hold a Master's degree or equivalent in statistics, computer science, mathematics, or a closely related field
- have a solid background in probability and statistical modeling
- have experience in programming languages such as Python or R

The Faculty of Informatics at USI

The Faculty of Informatics at USI is a renown research institution in the fields of computational and data sciences. It gathers international faculty members and students and offers an innovative curriculum with several specialised and research-oriented master degrees as well as PhD programmes. The Faculty has an active network of research partnerships with other Swiss and international centres, and supports research collaborations and student mobility. For more information, visit the Faculty of Informatics webpage.

Application Process

Candidates are requested to submit the following documents to Prof. Deborah Sulem (deborah.sulem@usi.ch) and Prof. Xenia Miscouridou (miscouridou.xenia@ucy.ac.cy):

- a detailed CV highlighting relevant academic and research experience
- a statement of purpose (max 2 pages) outlining research interests, relevant experience and how they align with this project, motivations for obtaining a Ph.D. and current plans for a professional career after obtaining the Ph.D. degree. Please mention any prior experience with point process models, Bayesian methodology or nonparametric methods.
- academic transcripts of prior degrees.
- contact information of two academic referees

Shortlisted candidates will be invited for an interview. For further details, please contact Deborah Sulem (deborah.sulem@usi.ch).