

Objet **POSTDOCTORAL POSITION IN STATISTICS**
——— **ENSAI (RENNES, FRANCE)**

Two-year postdoctoral position at ENSAI

A postdoctoral position in statistics is available as part of the AXA Research Fund Flash Call COVID-19 grant "Tail risk management and mitigation using innovative extreme value techniques". The postdoctoral fellow will be based at ENSAI and the CREST lab in Rennes, France, and will be supervised by Gilles Stupfler.

Project description: The goal of this project is to work on the inference and prediction of risk in the context of strongly disruptive events, such as the current twin shocks of the COVID-19 pandemic and the oil price crash, but also climate change and related extreme climate episodes. The project will follow two strands of work:

1. Carrying out inference on non-stationary extremes, with a view on modelling the economic and financial consequences of the global spread of COVID-19 given auxiliary geographical, sanitary and climate information, by developing a general methodology using various risk metrics, including recently introduced expectile- and extremile-based risk measures.
2. Harnessing the wealth of functional data at our disposal to construct nonparametric estimators for extreme regression risk measures with functional covariates, with a view on analysing and predicting the aftermath of the COVID-19 pandemic.

Qualifications: The candidate should hold a PhD degree in probability or statistics and have an emerging track record of high-quality publications and data analysis. It is expected that the candidate will have expertise in either extreme value analysis and/or high-dimensional data analysis. Substantial experience of Matlab, R, Python and/or C++ is necessary.

Duration, salary and benefits: The position is due to start on 1st October 2020 for a maximal duration of 24 months. Monthly net salary is approximately €2,000 (gross salary in the region of €3,700). Substantial funding is available for equipment, travel and expenses.

Application procedure: Please provide a full academic CV and a cover letter, in which you will in particular mention whether you are legally able to work in France. Applications will be reviewed as they are received. We especially welcome and encourage applications from women, people part of ethnic/religious minorities, people with disabilities, and LGBT colleagues.

Applications and enquiries should be made by email at gilles.stupfler@ensai.fr.

This position is open until filled. Early application is strongly encouraged.