

The **Chair of Risk, Safety and Uncertainty Quantification in Engineering** at ETH Zurich develops computational methods for managing the uncertainties in physical models used in various fields of engineering and applied sciences (civil & mechanical engineering and geosciences, among others). The Chair develops the Matlab-based software UQLab ([www.uqlab.com](http://www.uqlab.com)), a new platform that gathers state-of-the-art algorithms for uncertainty quantification.

## Ph.D position in surrogate modelling of stochastic simulators for uncertainty quantification

**The Chair opens** a Ph.D. position in the field of surrogate modelling of stochastic simulators for uncertainty quantification. Stochastic simulators are a class of computational models that are characterized by having a stochastic response. In other words, the response of a stochastic model to a single set of input parameters is a distribution, rather than a single deterministic value (resp. vector). In this project, an array of theoretical and computational tools will be developed to quantitatively tackle the problem of performing surrogate-model-based uncertainty quantification with stochastic simulators. The position is available as of January 1st, 2018.

**The ideal candidate** has a Master's degree in applied mathematics, computational sciences or civil / mechanical engineering. Together with a strong background in scientific computing, he/she has proven experience in probability theory & statistics and some exposure to uncertainty quantification techniques (e.g. surrogate modelling, multi-fidelity simulation, global sensitivity analysis, Gaussian random fields, copula theory, etc.). The candidate is familiar with developing scientific codes and has proven advanced Matlab programming skills. We are looking for highly motivated candidates who are self-driven, have excellent communication and writing skills (fluent spoken and written English is mandatory) and enjoy working in an interactive international environment with other PhD students, post-docs and senior scientists.

**We look forward** to receiving your online application including a letter of motivation, CV, diplomas and contact details of 2 referees. Please note that we exclusively accept applications submitted through our online application portal. Applications via email or postal services will not be considered.

**For further information** about the institute please visit our website [www.rsuq.ethz.ch](http://www.rsuq.ethz.ch). Questions regarding the position should be directed to Dr. Stefano Marelli, Senior Assistant, by email [marelli\(at\)ibk.baug.ethz.ch](mailto:marelli(at)ibk.baug.ethz.ch) (no applications).



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