



Software for Uncertainty Quantification

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The awareness of the role of uncertainty in virtually all fields of applied sciences has grown steadily over the past decades. The inclusion of uncertainty quantification (UQ) in predictive models is a technical challenge that fostered the development of techniques such as probabilistic/non-probabilistic modelling of the sources of uncertainty, surrogate modelling, sensitivity analysis, model calibration, robust optimization, etc. The deployment and further diffusion of such techniques, however, is closely related to the availability of proper software that can be incorporated by researchers and practitioners into their own workflows.

This mini-symposium aims at bringing together leading and innovative players in the international uncertainty quantification software scene so as to foster discussions and exchange of ideas between developers and perspective users. Contributions are welcome on the following topics: non-intrusive UQ techniques, surrogate modelling, multi-fidelity modelling, high-performance computing in UQ, general-purpose UQ software and case studies and applications to real-scale industrial problems.