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ENABLING TECHNOLOGIES FOR DIGITAL TWINS: MODEL REDUCTION AND SCIENTIFIC MACHINE LEARNING

Alvaro Coutinho[*1] and Alessandro Reali[2] and Gianluigi Rozza[3]*

[1]Federal University of Rio de Janeiro
[2]University of Pavia
[3]SISSA, Scuola Internazionale Superiore di Studi Avanzati

MINISYMPOSIUM

In the present days, since more and more powerful heterogeneous computers are continuously emerging, scientists and engineers have been facing unprecedented challenges of adapting their workflows to the challenges posed by digital twins and scientific machine learning. This mini-symposium intends to provide a forum for attendees to exchange information, share best practices, and to keep current on the rapidly evolving information technologies impacting the convergence of simulation tools, digital twins and scientific machine learning. The Mini Symposium topics cover (but are not limited to):

Computational environments for advanced scientific machine learning and engineering computation
Digital prototyping techniques
Enabling software technologies
Data science in computational mechanics applications
Software libraries and applications to for digital twins, model reduction, and machine learning
Supporting tools in performance evaluation, visualization, verification and validation
Scientific workflows, theoretical frameworks, methodology and algorithms