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special issue
open call



Machine Learning, Low-Rank Approximations and Reduced Order Modeling in Computational Mechanics

in Mathematical and Computational Applications, MDPI

Scope. With ever-increasing features included into engineering simulations the technical challenges for simulations have increased, especially, if they are used to explore high-dimensional parameter spaces, to optimize designs, to provide means for optimal control problems and if they are carried out on low-cost devices. The replacement of dedicated simulations by data-driven methods, by low-rank approximations and by reduced modeling strategies is finding its way into industrial applications for obvious reasons. Articles related to the development and the properties of methods from the fields of **machine learning**, **tensor** and **low-rank approximations** and **reduced order modeling** are invited for this special issue. Papers connecting the different disciplines and regarding error control for surrogate models are particularly welcome. Authors are invited to upload supplementary material, e.g., software, data-sets or instructive videos complementing the research.

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Guest editors Felix Fritzen and David Ryckelynck

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