ADVANCED COMPUTATIONAL MECHANICS BASED ON DATA-DRIVEN TECHNIQUES FOR STRUCTURE, STRUCTURAL DYNAMICS AND AEROELASTICITY

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MINISYMPOSIUM

The rapid rise and continuous growth of data-driven processes, coupled with advancements in deep learning and machine learning, have led to a significant convergence across various fields in applied computational mechanics. In this context, this mini-symposium aims to explore the intersection of these cutting-edge technologies with a focus on their applications in structures, structural dynamics, and aeroelasticity.

Topics to be covered in this mini-symposium include, but are not limited to, data-driven methods, the incorporation of machine learning techniques, uncertainty quantification, and addressing inverse problems in structures, structural dynamics, and aeroelasticity. With a special emphasis on solving large-scale industry-relevant challenges, we will delve into the practical implications of these advancements in fields such as multiphysics and design optimization. The mini-symposium serves as a collaborative platform, bringing together researchers working on both fundamental and applied aspects of advanced computational mechanics based on data-driven techniques.