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Arts et Métiers Institute of Technology

Natural Element Method for the Simulation of Structures and Processes

Francisco Chinesta, Serge Cescotto, Elias Cueto, Philippe Lorong

Description

Computational mechanics is the discipline concerned with the use of computational methods to study phenomena governed by the principles of mechanics. Before the emergence of computational science (also called scientific computing) as a "third way" besides theoretical and experimental sciences, computational mechanics was widely considered to be a sub-discipline of applied mechanics. It is now considered to be a sub-discipline within computational science.

This book presents a recent state of the art on the foundations and applications of the meshless natural element method in computational mechanics, including structural mechanics and material forming processes involving solids and Newtonian and non-Newtonian fluids. 4th cover, excerpt from publisher's website.