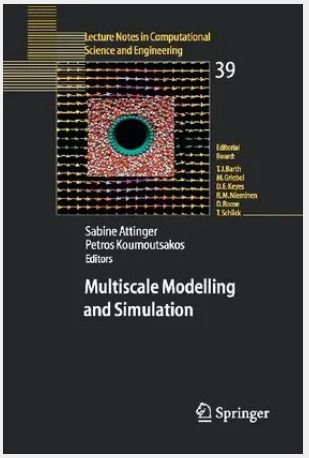
Attinger / Koumoutsakos

Multiscale Modelling and Simulation



In August 2003, ETHZ Computational Laboratory (CoLab), together with the Swiss Center for Scientific Computing in Manno and the Università della Svizzera Italiana (USI), organized the Summer School in "Multiscale Modelling and Simulation" in Lugano, Switzerland. This summer school brought together experts in different disciplines to exchange ideas on how to link methodologies on different scales. Relevant examples of practical interest include: structural analysis of materials, flow through porous media, turbulent transport in high Reynolds number flows, large-scale molecular dynamic simulations, ab-initio physics and chemistry, and a multitude of others. Though multiple scale models are not new, the topic has recently taken on a new sense of urgency. A number of hybrid approaches are now created in which ideas coming from distinct disciplines or modelling approaches are unified to produce new and computationally efficient techniques.

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