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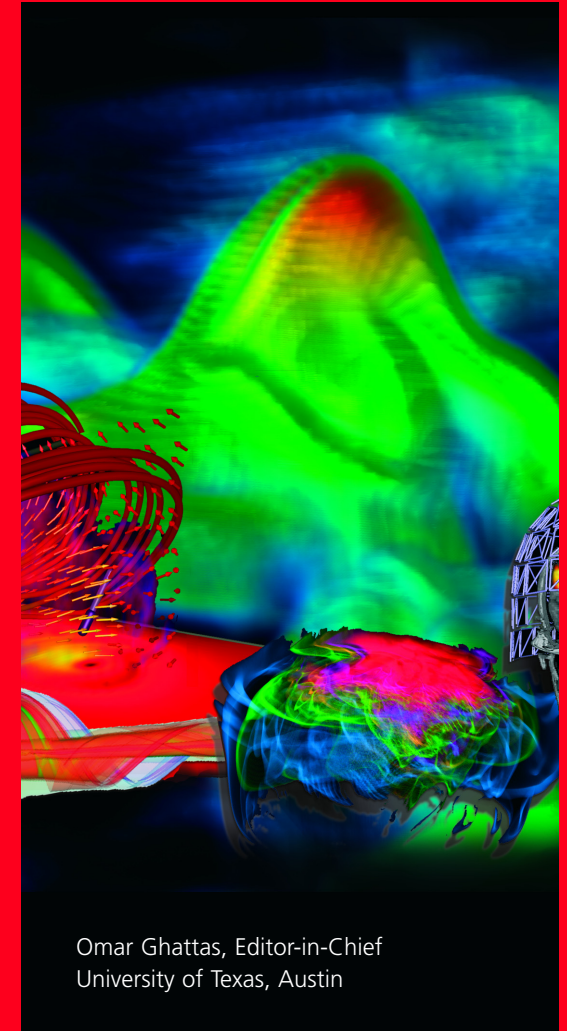
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COMPUTATIONAL SCIENCE AND ENGINEERING



Omar Ghattas, Editor-in-Chief
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• BOOKS PUBLISHED IN THE SERIES

An Introduction to Modeling and Simulation of Particulate Flows

Tarek I. Zohdi

Real-Time PDE-Constrained Optimization

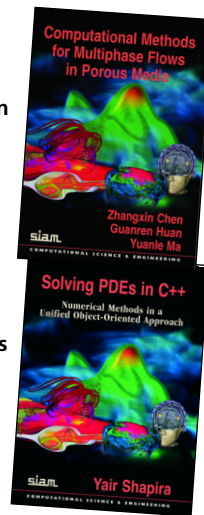
Edited by Lorenz T. Biegler, Omar Ghattas, Matthias Heinkenschloss, David Keyes, and Bart van Bloemen Wanders

Computational Methods for Multiphase Flows in Porous Media

Zhangxin Chen, Guanren Huan, and Yuanle Ma

Solving PDEs in C++: Numerical Methods in a Unified Object-Oriented Approach

Yair Shapira



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- Computational fluid dynamics
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- Computational solid mechanics and materials
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- Discrete and combinatorial algorithms for CS&E
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- Meshing and adaptivity
- Multiscale methods and models
- Numerical algorithms for CS&E
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- Parallel and distributed computing
- Problem-solving environments
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