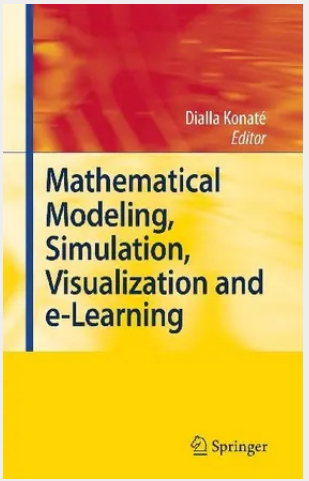
Konaté

Mathematical Modeling, Simulation, Visualization and e-Learning

Proceedings of an International Workshop held at Rockefeller Foundation' s Bellagio Conference Center, Milan, Italy, 2006

This book features articles written by some of the most prominent leading applied mathematicians as well as young and promising ones. The common objective of these articles is to present an important issue which is currently widely discussed in scientific investigation with major human, economic or ecological implications. Each article is as deep as an expert lecture but is also self-contained, so that even isolated scientists with limited resources can profit greatly from it.

Numerical Methods and Problem Solving.- Quasi-Analytical Computation of Energy Levels and Wave Functions in a Class of Chaotic Cavities with Inserted Objects.- Existence Results and Open Problems in the Kinetic Theory of Dense Gases.- The High Performance Asymptotic Method in Numerical Simulation.- Modelling the Thermal Operation in a Catalytic Converter of an Automobile's Exhaust.- Modelling Transmission Dynamics of Childhood Diseases in the Presence of a Preventive Vaccine: Application of Adomian Decomposition Technique.- A New MPFA Formulation for Subsurface Flow Problems on Unstructured Grids: Derivation of the Discrete Problem.- Analysis of a New MPFA Formulation for Flow Problems in Geologically Complex Media.- A Small Eddy Correction Algorithm for the Primitive Equations of the Ocean.- Modeling and Control of Phenomena.- Aspects of Modeling Transport in Small Systems with a Look at Motor Proteins.- Optimal Control of Ill-Posed Parabolic Distributed Systems.- A Parametric Study of Low Reynolds Number Blood Flow in a Porous, Slowly Varying, Stenotic Artery with Heat Transfer.- Stability of Generalized Convexity and Monotonicity.- Are Viscoelastic Flows Under Control or Out of Control?.- On Topological Optimization and Pollution in Porous Media.- Dynamical Analysis of Infectious Diseases in Spatially Heterogeneous Environments.- Approximate Scale-Invariant Random Fields: Review and Current Developments.- Simulation and Visualization.- Non-Stationary Vibrations of Viscoelastic Circular Cylindrical Thick Shell Under the Influence of Temperature.- Mathematical Vibration Modelling of the Pre-Stressed Viscoelastic Thick-Walled Cylindrical Shell.- Viscoelastic Fluids in a Thin Domain: A Mathematical Study for a Non-Newtonian Lubrication Problem.- From the African sona Tradition to New Types of Designs and Matrices.- Finite Dynamical Systems: A Mathematical Framework for Computer Simulation.- e-Learning.- New Pedagogical Models for Instruction in Mathematics.



53,49 €
49,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783540743385
Medium: Buch
ISBN: 978-3-540-74338-5
Verlag: Springer Berlin Heidelberg
Erscheinungstermin: 07.12.2007
Sprache(n): Englisch
Auflage: 1. Auflage 2007
Produktform: Gebunden
Gewicht: 689 g
Seiten: 371
Format (B x H): 160 x 241 mm

fachmedien.de
WISSEN. EINFACH. FINDEN.

24.11.2026 | 18:38 Uhr

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)