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Francois Baccelli Stochastic discrete event systems

Michael V. Berry Asymptotics and mechanics

Haim Brézis Ginzburg-Landau vortices, superconductors and liquid cristals

Carlo Cercignani Mathematical problems in rarefied gas dynamics

Ingrid Daubechies Wavelets and new developments

Pierre Degond Macroscopic models of charged-particle transport derived from kinetic theory

Hans Föllmer Stochastic analysis in finance

Klaus Hasselmann Global climate modelling

E. John Hinch Converging flows of elastic liquids

R. D. James Hysteresis in phase transformations

Joseph B. Keller Combining analytical and numerical methods

Jacques-Louis Lions Some mathematical questions connected with climate models

Jerrold E. Marsden Dynamical systems and geometric mechanics in control theory

George Meyer Nonlinear control and discrete event systems

David Mumford Statistical methods in computer vision

Kazuo Murota Structural approach in systems analysis by mixed matrices

Helmut Neunzert Particle methods: theory and applications

Larsgunnar Nilsson

Computer simulation of vehicle collisions

John R. Ockendon The moving interface between mathematics and industry

Alan S. Perelson Mathematical modeling of the immune system in health and disease

Charles S. Peskin The immersed boundary method for biological fluid dynamics

Friedrich Pfeiffer Robotics in theory and practice

Alfio Quarteroni Modeling and simulation of fluid flow in complex porous media

Rolf Rannacher Computation of viscous incompressible flows

Gregory I. Sivashinsky Topics in dynamics of flame-flow interaction

Lloyd N. Trefethen Why Gaussian elimination works even though it is unstable

Paul Van Dooren Model reduction and the Lanczos method

Michael J. Ward Hybrid asymptotic-numerical methods for certain singular perturbation problems

Qing-cun Zeng Silt sedimentation and relevant engineering problems - an example of natural cybernetics

Ludwig-Prandtl- Gedächtnisvorlesung

D. G. Crighton Solitons, solitary waves, and large-scale order in fluid mechanics