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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Contents -- Preface -- A scheme for compressible two-phase flows and interface problems -- Multi-level fast multipole Galerkin method for the boundary integral solution of the exterior Helmholtz equation -- An overview of subgrid upscaling for elliptic problems in mixed form -- Mixed finite elements for elasticity in the stress-displacement formulation -- New variants of defect correction for boundary value problems in ordinary differential equations -- Scientific computing in energy and environment -- Approximate analysis of extended Williamson fluids for Powell-Sabin-Heindl elements -- Frequency domain method for the scalar wave equation with second order absorbing boundary condition -- Scalable FETI with optimal dual penalty for semicoercive variational inequalities -- Algebraic multigrid and Schur complement strategies within a multilayer spectral element ocean model -- Diverse vortex dynamics in superfluids -- Adaptive wavelet methods for advection-reaction equations -- Approximation of an MHD problem using Lagrange finite elements -- Best approximation for the p-version of the finite element method in three dimensions in the framework of the Jacobi-weighted Besov spaces -- Non-isotropic Jacobi spectral method -- Improved method for solving the heat equation with BEM and collocation -- Modelling of transport

with non-equilibrium effects in dual-porosity media -- Error estimate for a two-level scheme of Newton type for the Navier-Stokes equation -- Mathematical modeling and numerical algorithms for poroelastic problems -- Fast Poisson solver in a three-dimensional ellipsoid -- Modeling horizontal wells with the CVFA method in black oil reservoir simulations -- Radial basis function based meshless method for groundwater modeling -- Upwinding finite covolume methods for unsteady convection-diffusion problems -- Parallel computing in the black oil model -- Finite element model of piezoelectric resonator -- Discontinuous finite element methods for acoustic and elastic wave problems -- Heuristics for developing variations on future air traffic schedule characteristics for air traffic simulation -- FEM/FVM modelling of processes in a combustion engine -- A finite control volume method for the reduction of an iron ore-coal composite pellet in an axisymmetric temperature field -- The fast multipole method for arbitrary Green's functions -- A mathematical model for ESP simulation -- Mixed-hybrid discrete fracture network model -- A new numerical algorithm for treatment of convective terms and its applications to PDEs -- Direct numerical simulation of turbulent channel flow with bubbles -- RKDG finite element schemes combined with a gas-kinetic method for one-dimensional compressible Euler equations.
