



## High Performance Computing in Science and Engineering 2000

By Krause, E. / Jäger, W.

 $Book\ Condition:\ New.\ Publisher/Verlag:\ Springer,\ Berlin\ |\ Transactions\ of\ the\ High\ Performance$ Computing Center Stuttgart (HLRS) 2000 | An overview of recent developments in high performance computing and simulation, with special emphasis on the industrial relevance of the presented results and methods. The book showcases an innovative combination of the state-of-the-art modeling, novel numerical algorithms and the use of leading-edge high-performance computing systems. | Spinodal Decomposition in Binary Polymer Blends: Monte Carlo Simulations and Dynamic Mean Field Theory.- Dynamics of Convection and Dynamos in Rotating Spheres.- Recent Developments in IMD: Interactions for Covalent and Metallic Systems.- Finite Difference Modelling of Seismic Wave Phenomena within the Earth's Upper Mantle.- Collisional Dynamics of Black Holes and Star Clusters Using Massively Parallel Computing.- Three-Dimensional Direct and Inverse Electromagnetic Scattering.- Precession Driven Flow in Ellipsoidal Cavities.- The Computation of Highly Exited Hyperbolic 3D-eigenmodes and its Application to Cosmology.- Fluid Jet Simulations using Smoothed Particle Hydrodynamics.- Spectral Properties of CUO2 Planes in a Cluster Perturbation Approach.- Electronic, Structural and Vibrational Properties of Chalcogenides on Si(001) and Ge(001) Surfaces.- Dynamical Properties of the t-J Model.- Effects of Three Nucleon-Interactions in A = 4.- Phase Transitions in Insulating 1D Electron Systems.- Excited States of Semiconductors and Molecules.-...



## Reviews

Simply no phrases to clarify. It is really basic but surprises from the 50 percent of the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Mr. Noah Cummerata IV

Extremely helpful for all group of men and women. it absolutely was writtern extremely perfectly and valuable. Your way of life span will be transform when you complete looking at this ebook.

-- Prof. Trever Torphy