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	Nota di contenuto	Theory -- A Hybrid Approach to Reaction-Diffusion Processes Simulation -- Formal Verification of Coherence for a Shared Memory Multiprocessor Model -- Static Analysis for Secrecy and Non-interference in Networks of Processes -- Consensus in One Communication Step -- Design Space Exploration for Massively Parallel Processor Arrays -- GCA: Global Cellular Automata. A Flexible Parallel Model -- Cellular-Pipelined Algorithm Architecture for Polynomial Computing -- MetaPL: A Notation System for Parallel Program Description and Performance Analysis -- First-Order 2D Cellular Neural

Networks Investigation and Learning -- Quiescent Uniform Reliable Broadcast as an Introduction to Failure Detector Oracles -- A Transaction Processing Model for the Mobile Data Access System -- Characterizing Timed Net Processes Categorically -- Mapping Heterogeneous Task Graphs onto Networks: Execution Time Optimization -- An O[n 3/z 3] Reduction Procedure for Determining the Maximum Degree of Parallelism in Parallel Applications -- Software and Architecture -- ARTCP: Efficient Algorithm for Transport Protocol for Packet Switched Networks -- Extension of Java Environment by Facilities Supporting Development of SPMD Java-Programs -- Mechanisms of Parallel Computing Organization for NeuroCluster -- Parallel SPMD-Tasks Graph Description Language for Network Clusters -- Optimizing Metacomputing with Communication-Computation Overlap -- WebCluster: A Web-Accessible Cluster Computing System Based on Coordination and Mobility -- On Using SPiDER to Examine and Debug Real-World Data-Parallel Applications -- Experimental Version of Parallel Programs Translator from Petri Nets to C++ -- Typing the ISA to Cluster the Processor -- Send-Recv Considered Harmful? Myths and Truths about Parallel Programming -- UNICORE: A Grid Computing Environment for Distributed and Parallel Computing -- Parallel Adaptive Mesh Refinement with Load Balancing for Finite Element Method -- Concurrent Implementation of Structurally Synthesized Programs -- An Associative Version of the Bellman-Ford Algorithm for Finding the Shortest Paths in Directed Graphs -- Fusion of Concurrent Invocations of Exclusive Methods -- Computational Portal: Remote Access to High-Performance Computing -- Event Logic Programming -- Techniques for Increasing Performance of CORBA Parallel Distributed Applications -- Manager-Worker Parallelism versus Dataflow in a Distributed Computer Algebra System -- Communication Interface CoIn -- Design of a Tool for Providing Dynamic Network Information to an Application -- Compilation Principle of a Specification Language Dedicated to Signal Processing -- An Approach to Composing Parallel Programs -- Web-Based Parallel Simulation of AGVs Using Java and JINI -- Applications -- On the Parallelezation of Domain Decomposition Methods for 3-D Boundary Value Problems -- Parallel Generation of Percolation Beds Based on Stochastic Cellular Automata -- Parallel Simulation of 3D Incompressible Flows and Performance Comparison for Several MPP and Cluster Platforms -- Distributed Simulation of Hybrid Systems with HLA Support -- Application of the Parallel Computing Technology to a Wave Front Model Using the Finite Element Method -- A General Parallel Computing Approach Using the Finite Element Method and the Objects Oriented Programming by Selected Data Technique -- Parallel Implementation of a Corrected DSMC Method -- Parallel Algorithms for Non-stationary Problems: Survey of New Generation of Explicit Schemes -- Tool Environments in CORBA-Based Medical High Performance Computing -- Parallel Algorithms for the Analysis of Biological Sequences -- Some Parallel Monte Carlo Algorithms -- Implementation of the Parallel Four Points Modified Explicit Group Iterative Algorithm on Shared Memory Parallel Computer -- A Parallel Expressed Sequence Tag (EST) Clustering Program -- Protein Sequence Comparison on the Instruction Systolic Array -- SCI-Based LINUX PC-Clusters as a Platform for Electromagnetic Field Calculations.

| Sommario/riassunto | This book constitutes the refereed proceedings of the 6th International Conference on Parallel Computing Technologies, PaCT 2001, held in Novosibirsk, Russia in September 2001. The 36 revised full papers and 13 posters presented together with 4 invited papers were carefully reviewed and selected from 81 submissions. The papers presented |

span the whole range of parallel processing from theory and software through architecture and applications. Among the topics addressed are shared memory systems, formal methods, networks of processes, cellular automata, mobile data access systems, Java programming, neuro-cluster computing, network clusters, load balancing, etc.