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Parallel Computing Technologies

16th International Conference, PaCT 2021 Kaliningrad, Russia, September 13–18, 2021 Proceedings



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Preface

The 16th International Conference on Parallel Computing Technologies (PaCT 2021) was a four-day event held in Kaliningrad, Russia. It was organized by the Institute of Computational Mathematics and Mathematical Geophysics of the Russian Academy of Sciences (Novosibirsk) in cooperation with the Immanuel Kant Baltic Federal University (Kaliningrad), Novosibirsk State University, and Novosibirsk State Technical University.

Previous conferences of the PaCT series were held in various Russian cities every odd year beginning with PaCT 1991, which took place in Novosibirsk (Akademgorodok), whilst the 15th Conference took place in Almaty, Kazakhstan. Since 1995, all the PaCT proceedings have been published by Springer in the LNCS series.

The aim of the PaCT 2021 conference was to provide a forum for an exchange of views among the international community of researchers in the field of the development of parallel computing technologies. The PaCT 2021 Program Committee selected papers that contributed new knowledge in methods and tools for parallel solution of topical large-scale problems. The papers selected for PaCT 2021

- propose and study tools for parallel program development such as languages, performance analysers, and automated performance tuners,
- examine and optimize the processes related to management of jobs, data, and computing resources at high performance computing centers,
- propose new computer simulation models and algorithms specifically targeted to parallel computing architectures, and
- theoretically study practically relevant properties of parallel programming models and parallel algorithms.

Authors from 15 countries submitted 62 papers. The submitted papers were subject to a single blind reviewing process, with papers receiving an average of 2.8 reviews. The Program Committee selected 24 full papers and 12 short papers for presentation at PaCT 2021.

Many thanks to our sponsors: the Ministry of Science and Higher Education of the Russian Federation, the Russian Academy of Sciences, and the RSC Group.

September 2021

Victor Malyshkin

Organization

The PaCT 2021 was organized by the Institute of Computational Mathematics and Mathematical Geophysics, Siberian Branch of Russian Academy of Sciences (Novosibirsk, Russia) in cooperation with the Immanuel Kant Baltic Federal University, Novosibirsk State University, and Novosibirsk State Technical University.

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Contents

Parallel Programming Methods and Tools	
Trace-Based Optimization of Fragmented Programs Execution in LuNA System	3
A New Model-Based Approach to Performance Comparison of MPI Collective Algorithms	11
Deterministic OpenMP and the LBP Parallelizing Manycore Processor Bernard Goossens, Kenelm Louetsi, and David Parello	26
Additional Parallelization of Existing MPI Programs Using SAPFOR Nikita Kataev and Alexander Kolganov	41
Sparse System Solution Methods for Complex Problems	53
Resource-Independent Description of Information Graphs with Associative Operations in Set@l Programming Language	74
High-Level Synthesis of Scalable Solutions from C-Programs for Reconfigurable Computer Systems	88
Precompiler for the ACELAN-COMPOS Package Solvers	103
Execution of NVRAM Programs with Persistent Stack	117
A Study on the Influence of Monitoring System Noise on MPI Collective Operations	132
High-Efficiency Specialized Support for Dense Linear Algebra Arithmetic in LuNA System	143

Applications

Efficient Cluster Parallelization Technology for Aerothermodynamics Problems	153
Oleg Bessonov	
Computational Aspects of Solving Grid Equations in Heterogeneous Computing Systems	166
Alexander Sukhinov, Vladimir Litvinov, Alexander Chistyakov, Alla Nikitina, Natalia Gracheva, and Nelli Rudenko	100
Optimized Hybrid Execution of Dense Matrix-Matrix Multiplication on Clusters of Heterogeneous Multicore and Many-Core Platforms	178
Parallelization of Robust Multigrid Technique Using	100
OpenMP Technology	196
Network Reliability Calculation with Use of GPUs	210
Memory-Efficient Data Structures	
Implicit Data Layout Optimization for Portable Parallel Programming in C++	223
On Defragmentation Algorithms for GPU-Native Octree-Based	
AMR Grids	235
Zipped Data Structure for Adaptive Mesh Refinement	245
Automatic Parallel Tiled Code Generation Based on Dependence	
Approximation	260
Experimental Studies	
Scalability Issues in FFT Computation	279

C	Contents
High Performance Implementation of Boris Particle Pusher on DPC+ A First Look at oneAPI	
Evaluating the Performance of Kunpeng 920 Processors on Modern Applications	
Job Management	
Optimization of Resources Allocation in High Performance Distribut Computing with Utilization Uncertainty	
Influence of Execution Time Forecast Accuracy on the Efficiency of Scheduling Jobs in a Distributed Network of Supercomputers Boris Shabanov, Anton Baranov, Pavel Telegin, and Artem Tikhon	
Performance Estimation of a BOINC-Based Desktop Grid for Large-Molecular Docking	
Essential Algorithms	
Consensus-Free Ledgers When Operations of Distinct Processes are Commutative	
Design and Implementation of Highly Scalable Quantifiable Data Structures	
Optimal Concurrency for List-Based Sets	
Mobile Agents Operating on a Grid: Some Non-conventional Issues in Parallel Computing	
Computing Services	
Parallel Computations in Integrated Environment of Engineering Mod	
and Global Optimization	

xiv Contents

Implementing Autonomic Internet of Things Ecosystems – Practical	
Considerations	420
Kumar Nalinaksh, Piotr Lewandowski, Maria Ganzha,	
Marcin Paprzycki, Wiesław Pawłowski,	
and Katarzyna Wasielewska-Michniewska	
Information-Analytical System to Support the Solution of Compute-	
Intensive Problems of Mathematical Physics on Supercomputers	434
Yury Zagorulko, Galina Zagorulko, Alexey Snytnikov, Boris Glinskiy, and Vladimir Shestakov	
The Web Platform for Storing Biotechnologically Significant Properties	
of Bacterial Strains	445
Aleksey M. Mukhin, Fedor V. Kazantsev, Alexandra I. Klimenko,	
Tatiana N. Lakhova, Pavel S. Demenkov, and Sergey A. Lashin	
Cellular Automata	
Minimal Covering of the Space by Domino Tiles	453
Rolf Hoffmann, Dominique Désérable, and Franciszek Seredyński	
Application of the Generalized Extremal Optimization and Sandpile Model	
in Search for the Airborne Contaminant Source	466
Miroslaw Szaban, Anna Wawrzynczak, Monika Berendt-Marchel,	
and Lukasz Marchel	
Author Index	479