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Victor Malyshkin (Ed.)

Parallel Computing Technologies

9th International Conference, PaCT 2007
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Proceedings

Volume Editor

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Preface

PaCT-2007 (Parallel Computing Technologies) was a four-day conference held in Pereslavl-Zalessky, September 3–7, 2007. This was the ninth international conference in the PaCT series. The conferences are held in Russia every odd year. The first conference, PaCT-91, was held in Novosibirsk (Academgorodok), September 7–11, 1991. The next PaCT conferences were held in Obninsk (near Moscow), August 30 - September 4, 1993, in St.Petersburg, September 12–15, 1995, in Yaroslavl, September 9–12 1997, in Pushkin (near St.Petersburg), September 6–10, 1999, in Academgorodok (Novosibirsk), September 3–7, 2001, in Nizhni Novgorod, September 15–19, 2003, in Krasnoyarsk, September 5–9, 2005. Since 1995 all the PaCT proceedings have been published by Springer in the LNCS series.

PaCT-2007 was jointly organized by the Institute of Computational Mathematics and Mathematical Geophysics of the Russian Academy of Sciences (RAS) and the Program Systems Institute of the RAS (Pereslavl-Zalessky).

The purpose of the conference was to bring together scientists working on theory, architecture, software, hardware and the solution of large-scale problems in order to provide integrated discussions on parallel computing technologies.

The conference attracted about 100 participants from around the world. Authors from 25 countries submitted 98 papers. Of those, 37 papers were selected for the conference as regular papers; there were also 2 invited papers. In addition there were a number of posters presented. All the papers were internationally reviewed by at least three referees.

A demo session was organized for the participants, and different tools were submitted for a demonstration and tutorial. One of them was the Open TS: Dynamic Parallelization System for Multicore CPUs, SMPs, Clusters and GRIDs.

In conjunction with PaCT-2007, the Russian – Taiwan symposium on Methods and Tools of Parallel Programming of Multicomputers was held in Pereslavl-Zalessky, September 2–3, 2007. The symposium was organized by the Institute of Computational Mathematics and Mathematical Geophysics of RAS (Novosibirsk, Russia), the Institute of Program Systems RAS (Pereslavl-Zalessky) and the Chung Hua University (Taiwan). The symposium attracted 22 papers and 4 tools demonstrations and tutorials. Of those, 16 were selected for the symposium as regular papers; there was also 1 invited paper.

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PaCT-2007 was organized by the Supercomputer Software Department, Institute of Computational Mathematics and Mathematical Geophysics SB RAS (Novosibirsk) in cooperation with the Program Systems Institute of RAS (Pereslavl-Zalessky).

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