Message from the General Co-Chairs

Welcome to Santa Fe, New Mexico – the Land of Enchantment – and the 18th International Parallel and Distributed Processing Symposium (IPDPS 2004). We are honored to serve the international community by bringing together researchers, scientists, and students, from academia, laboratories, and industry, to this premier meeting in Santa Fe, America’s oldest capital city nestled in the foothills of the Rocky Mountains and founded in 1607 by Spanish explorers. Santa Fe offers rich cultural heritage, arts, and culinary delights, and also boasts of the creativity here in New Mexico that is responsible for many firsts in computing history: to highlight just a few, in the late 1950’s IBM built the Stretch (7030) with Los Alamos National Laboratory – the first pipelined processor with aggressive optimization; in 1978 Microsoft was founded in Albuquerque; in 1996, the world witnessed the first teraflops computer, Sandia National Laboratories’s ASCI Red; and in 2000, University of New Mexico launched the IBM/Myricom LosLobos system, the first Linux SuperCluster on the national science grid.

The technical program assembled for this symposium is one of the highest quality in conference history. We thank Program Chair Burkhard Monien for his efforts putting together this incredible collection of papers and panels along with the assistance of Program Vice-Chairs Paul Spirakis, Horst Simon, Per Stenström, and Guang Gao. Not only do we recognize the program committee and reviewers for their hard work, but also each author who submitted a paper whether or not it was selected for presentation this week. Due to the very competitive nature of the selections this year, many strong papers could not be accommodated in the final program. We hope that you will enjoy the paper presentations and panels this week and continue IPDPS’s tradition as the premier conference for the dissemination of your novel research in parallel and distributed computing.

We are especially grateful to the IPDPS 2004 General Vice-Chair, Chip Weems, who has overseen many aspects of the conference, and who always helps out before we even know to ask. This year Chip streamlined the complementary portions of the symposium, such as the strong collection of international workshops and tutorials for which IPDPS has gained an excellent reputation. A collection of 17 workshops are co-located this year with IPDPS, with appreciation to the Workshop Chairs Luc Bougé and Alan Sussman, and the associated organizing chairs of these workshops. These workshops range in advanced computing topic areas such as heterogeneous, grid, massively-parallel, and wireless, models and performance, software and application, real-time systems, and computational biology, science, and engineering. Tutorials Chair Patricia J. Teller organized the three tutorials offered this year in emerging technologies such as InfiniBand, distributed data mining, and parallel computing on heterogeneous networks. Finally, Industrial Track Chair Kiran Bondalapati has shaped a top quality industrial-commercial program and recruited a number of sponsors to exhibit at this meeting.

The Proceedings Chair José Nelson Amaral along with his assistant, Rob Lake, have done an excellent job on a web-based system for collecting and verifying the hundreds of camera-ready manuscripts for the Symposium’s conference and workshops abstract book and electronic proceedings. We also thank IEEE CS Press managing editor Bob Werner for his effort on these proceedings.
Our sincere thanks and appreciation goes to the IPDPS Production Chair Sally Jelinek, a volunteer for IPDPS for so many years, and who deserves much of the credit for making the organization of this meeting a great success each year. Words cannot suffice to describe all of the hard work and dedication that Sally puts into every aspect of IPDPS, from logistical arrangements, overseeing publicity, advertisements, and our web site, producing the call for papers, call for participation, and advance program, and handling so many detailed aspects to the program all year long. As General Co-Chairs, we cannot thank Sally enough for her help; it is Sally who deserves all of the credit for ensuring that our conference runs smoothly year after year. This year, we thank Serge Chaumette and Yi Pan for their assistance as IPDPS Publicity Co-Chairs, and Anna Brown for maintaining the IPDPS web page.

Another long-standing IPDPS volunteer, Susamma Barua, has once again done a spectacular job as Local Arrangements Chair. Susamma works with the conference all year managing the detailed arrangements for a variety of aspects such as the hotel contract, meeting room space, audio-visual equipment, registration, wireless internet, and signage. We thank Susamma for her preparations and hard work that contribute to IPDPS’s continued success. This year, Susamma was assisted by Local Arrangements Co-Chair Wennie Shu. The IPDPS Finance Chair, Bill Pitts, is another volunteer with many years of service to our community. Bill prepares an accurate conference budget, tracks all income and expenses, and produces the final fiscal report. In fact, we are grateful to Bill since we never need to worry about finances, and our conference always operates at the highest levels of fiscal responsibility and financial integrity.

We recognize the University of New Mexico for hosting IPDPS 2004, and thank our host coordinator, Martina Kindilien, for assisting the General Co-Chairs and other organizers during the preparations for this year’s conference and for organizing the student volunteers.

The IEEE Computer Society once again is the sponsor of this symposium, and we thank the society’s Volunteer Services group for their ongoing help and assistance with the IPDPS conference series. Specifically, we thank Anne Marie Kelly and Elvia Gonzalez, along with assistance from Takiyah Hunter, Maggie Johnson, Nikki Nasabzadeh, and Kristine Weiand. This IEEE conference services group worked closely with our volunteer organizers and provided us significant support for planning this meeting, negotiating the hotel contract, assisting with publicity and organizing the registration. We also thank Mary-Kate Rada who worked closely with IPDPS for many years and helped with the early coordination of this meeting prior to her departure from IEEE.

IPDPS is the flagship activity of the IEEE Computer Society’s Technical Committee on Parallel Processing (TCP). If you are not already a member, please consider joining TCPP. This year at IPDPS, the TCPP General Membership Reception features an exciting talk by Srinidi Varadarajan on the Virginia Tech Apple X-Cluster, one of the fastest supercomputers in the world. Take a moment as well to browse the TCPP education exhibit, featuring a selection of recently-published parallel processing textbooks.

We would especially like to thank the IPDPS Steering Co-Chairs, Viktor K. Prasanna and George Westrom, for their enormous contributions steering and organizing this meeting. Their leadership and dedication to the community is remarkable. It is to their credit that this meeting has become the premier international conference for parallel and distributed computing. In addition we thank the rest of the Steering Committee for their guidance and contributions to this meeting.

Enjoy the symposium!