CALL FOR PAPERS

Eighteenth Annual ACM Symposium on PARALLELISM IN ALGORITHMS AND ARCHITECTURES (SPAA)

July 30-August 2, 2006, Cambridge, MA, USA http://www.spaa-conference.org

SCOPE: SPAA defines "parallel" broadly to encompass any computational system or model that can perform multiple operations or tasks simultaneously. Thus, the call for papers covers both traditional parallel and distributed algorithms and architectures, as well as new topics such as satellite networks, the web, quantum and DNA computing, etc. Topics of interest include, but are not limited to:

Parallel Computing

- Parallel Algorithms
- Parallel Complexity Theory
- Parallel Computing and Applications
- Models for Parallel and Distributed Computing
- Instruction Level Parallelism and VLSI
- Routing and Information Dissemination
- Parallelism in Selfish Computing and Games
- Parallel Data Structures
- Compilers and Tools for Parallel Computation
- Memory-Aware Algorithms
- Supercomputing Architecture and Computing

Massive Parallelism

- Cluster Computing and Grid Computing
- Mobile and Wireless Computing
- Internet and World Wide Web
- Sensor Networks
- Satellite and Radio Networks
- Other Large Networks
- Biologically Inspired Computing
- Pricing and Equilibria in Networks
- Quantum and DNA Computing
- Parallel Databases and Data Mining
- Metacomputing

CONFERENCE PRESENTATION: Regular presentations will be allotted a 25-minute talk and up to 10 pages in the proceedings. This format is intended for contributions reporting original research, submitted exclusively to this conference. Brief announcements will be allotted a 10-minute talk and a one-page abstract (each marked as a brief announcement) in the proceedings. This format is a forum for brief communications, which may be published later in other conferences.

SUBMISSIONS: Authors of contributed papers are encouraged to submit their manuscript electronically. The deadlines for electronic submissions are March 6, 2006 for regular papers and March 13, 2006 for brief announcements. These are firm deadlines. No extensions will be granted. Authors who are unable to submit electronically should contact the program chair, Uzi Vishkin, at vishkin@umiacs.umd.edu to receive instructions.

PAPER-SUBMISSION FORMAT: The cover page should include (1) title, (2) authors and affiliation, (3) postal and email address of the contact author, (4) a brief abstract describing the content of the paper, and (5) an indication if this is a regular presentation or a brief announcement. If requested by the authors, an extended abstract that is not selected for a regular presentation will also be considered for the SPAA brief announcements. Such a request will not affect the consideration of the paper for a regular presentation.

Submissions for regular presentations should include an introduction understandable to a nonspecialist including motivation and previous work, and a technical exposition directed to a specialist. It should not exceed 10 printed pages in 11-point type or larger (excluding cover, figures, and references). More details (figures and proofs) may be supplied in a clearly marked appendix to be read at the discretion of the program committee.

A submission for the SPAA brief announcements should be no longer than 3 pages on letter-size paper using at least 11-point font.

NOTIFICATION: Authors will be sent notification of acceptance or rejection by e-mail or letter mailed on or before **May 15, 2006**. A camera-ready copy of each accepted abstract must be prepared according to ACM guidelines for inclusion in the proceedings of the conference and must be received by **June 1, 2006**.

PROGRAM COMMITTEE:

Michael Bender $SUNY\ Stony\ Brook$

Anja Feldmann TU Munich

Robert Kleinberg U.C. Berkeley and Cornell U.

Geoff Lowney Intel Jaime Moreno IBM

John Reif *Duke U.*Baruch Schieber *IBM*Mary Vernon *U. Wisconsin*

Roger Wattenhofer ETH Zurich

Babak Falsafi Carnegie Mellon U.

Ashish Goel Stanford U.

Elias Koutsoupias *U. of Athens* Gary Miller *Carnegie Mellon U.*

Vijaya Ramachandran U. Texas, Austin

Christian Scheideler TU Munich

Nir Shavit Tel Aviv U.

Uzi Vishkin (chair) *U. Maryland* Katherine Yelick *U.C. Berkeley*