

# Run-Time Systems for Parallel Programming

*Koen Langendoen, Matthew Haines, and Gregory Benson (editors)*

RTSPP Workshop Proceedings  
Geneva, Switzerland, April 5, 1997



in conjunction with the

11th International Parallel Processing Symposium  
(IPPS'97)

## **Program committee**

Greg Andrews	Denis Caromel	Matthew Haines
Henri Bal	Ian Foster	Koen Langendoen
Gregory Benson	Dennis Gannon	Frank Müller
Wim Bohm	Dirk Grunwald	Ron Olsson

## **Workshop organization**

Matthew Haines – general chair  
Koen Langendoen – program chair  
Gregory Benson – co chair

## Preface

Runtime systems are critical to the implementation of parallel programming languages and libraries. They provide the core functionality of a particular programming model and the glue between the model and the underlying hardware and operating system. As such, runtime systems have a large impact on the performance and portability of parallel programming systems.

Despite the importance of runtime systems, few papers describing their design and implementation appear in the literature. To remedy this situation, we have been organizing the RTSPP Workshop, which provides a forum for researchers to present their results and ideas on runtime systems for parallel programming. The RTSPP workshop will take place on April 5, 1997 in Geneva, Switzerland in conjunction with IPPS'97.

The one-day workshop includes both invited talks and paper presentations. The invited speakers are: Alok Choudhary, Andrew Grimshaw, and Andrew Chien. The paper presentations were selected after a careful reviewing process; each paper was reviewed by at least three members of the program committee. Based on the reviewers' comments, the authors revised their papers for inclusion in these workshop proceedings.

We hope that RTSPP will become an interesting and exiting workshop.

*Koen Langendoen  
Matthew Haines  
Gergory Benson*

# Run-Time Systems for Parallel Programming Workshop Proceedings

---

## **A Portable Run-Time System for the SR Concurrent Programming Language**

Greg Benson

<http://elysium.cs.ucdavis.edu/~benson/>

---

## **ARTS -- Flexible Runtime Support for Massively Parallel Systems**

Lars Buettner

<http://www.first.gmd.de/persons/Buettner.Lars.html>

---

## **Runtime Support for Task Migration on Distributed Memory Architectures**

Yvon Jegou

[http://www.irisa.fr/caps/HTML/TaskMigration\\_US.html](http://www.irisa.fr/caps/HTML/TaskMigration_US.html)

---

## **Predictable Network Computing using Message-driven Scheduling**

Holger Karl

<http://www.informatik.hu-berlin.de/~karl>

---

## **Distributed Shared-Memory Threads: DSM-Threads**

Frank Mueller

<http://www.informatik.hu-berlin.de/~mueller>

---

## **The LiPS Runtime Systems based on Fault-Tolerant Tuple Space Machines**

Thomas Setz

<http://cdc-server.cdc.informatik.th-darmstadt.de/LiPS/>

---

