European Conference on Parallel Computing

Topic 13: Routing and Communication in Interconnection Networks

Description

This topic is devoted to communication issues in scalable compute and storage systems, such as parallel computers, networks of workstations, and clusters. All aspects of communication in modern systems are of interest, including advances in the design, implementation, and evaluation of interconnection networks, network interfaces, system and storage area networks, on-chip interconnects, communication protocols, routing and communication algorithms, and communication aspects of parallel and distributed algorithms. Submitted papers should present significant, original work in the practice or theory of addressing aspects of performance, reliability and availability, power consumption and heat disspation, cost, scalability, and management. The scope of the topic includes, but is not limited to:

Areas of Interest

- Interconnection networks
- Switch architectures
- Network interface architectures
- High-speed system area networks
- I/O architectures and storage area networks
- On-chip and power-efficient interconnects
- Lightweight and user-level communication protocols
- Routing algorithms
- Congestion management
- Fault-tolerant and reconfigurable networks
- Quality of service in communication subsystems
- Network performance evaluation and analysis
- Communication aspects of parallel and distributed algorithms
- Collective communication and synchronization support

Global Chair
Prof. Dr. Jose A. Gregorio
University of Cantabria
Computer Architecture Group
Spain
joseangel.gregorio@unican.es

Local Chair
Prof. Dr. Bettina Schnor
University Potsdam
Dept. of Computer Science
Germany
schnor@cs.uni-potsdam.de

Vice Chair
Prof. Dr. Angelos Bilas
ICS-FORTH & University of Crete
Greece
bilas@ics.forth.gr

Vice Chair
Prof. Dr. Olav Lysne
University of Oslo and
Simula Research Laboratory
Norway
olavly@simula.no