

Workshop on High-Speed Local Networks (HSLN) October 21, 2003

Schedule Overview:

8:30-9:30	Welcome and Keynote
9:30-10:45	Session I – Communications for Cluster Computing #1
10:45-11:00	Coffee break
11:00-12:15	Session II – Communications for Cluster Computing #2
12:15-1:30	Lunch
1:30-2:45	Session III – Network Processors and Switch Cores
2:45-3:15	Coffee and snack break
3:15-4:55	Session IV – High-Performance Networking
5:00-6:00	Poster Session

Welcome and Keynote (8:30 to 9:30)

Welcome: Dr. Bernd Heinrichs, Cisco Systems, HSLN03 Workshop Chair

Keynote: Dr. Egbert-Jan Sol, Ericsson Corp., *Public Ethernet – The Business Model*

Session I: Communications for Cluster Computing #1 (9:30 to 10:45)

PromisQoS: An Architecture for Delivering QoS to High-Performance Applications on Myrinet Clusters, Jothi P. Neelamegam, Srigurunath Chakravarthi, Manoj Apte, and Anthony Skjellum (Mississippi State University).

A User-level Multicast Performance Comparison of Scalable Coherent Interface and Myrinet Interconnects, Sarp Oral and Alan D. George (University of Florida).

Architecture and Implementation of the Socket Interface on Top of GAMMA, Lars Schneidenbach, Bettina Schnor, and Stefan Petri (Universität Potsdam).

Session II: Communications for Cluster Computing #2 (11:00 to 12:15)

Exploring the Relationship between Parallel Application Run-Time Variability and Network Performance in Clusters, Jeffrey J. Evans (Purdue University), Cynthia S. Hood (Illinois Institute of Technology), and William Gropp (Argonne National Laboratory).

Pipelining and Overlapping for MPI Collective Operations, Joachim Worringer (NEC Europe Ltd).

A Methodology for Devising Optimal All-Port All-to-All Broadcast Algorithms in Multidimensional Tori, Jean-Pierre Jung and Ibrahima Sakho (Université de Metz).

Lunch: (12:15 to 1:30)

Session III: Network Processors and Switch Cores (1:30 to 2:45)

An Optoelectronic Multi-Terabit CMOS Switch Core for Local Area Networks, Honglin Wu, Amir Gourgy, and Ted H. Szymanski (McMaster University).

Implementation of Resilient Packet Ring Nodes Using Network Processors, Andreas Kirstädter, Axel Hof, Walter Meyer, and Erwin Wolf (Seimens AG).

A Holistic Methodology for Network Processor Design, Olaf Bonorden, Friedhelm Meyer auf der Heide, Uwe Kastens, Dinh Khoi Le, Adrian Slowik, Michael Thies, Jörg-Christian Niemann, Mario Pormann, Ulrich Rückert (University of Paderborn), and Nikolaus Bröls (Infineon Technologies).

Session IV: High-Performance Networking (3:15 to 4:55)

Metro Ethernet – Deploying the Extended Campus using Ethernet Technology, Frank Brockners, Norman Finn, and Steve Phillips (Cisco Systems Inc.).

Using a Gigabit Ethernet Cluster as a Distributed Disk Array with Multiple Fault Tolerance, Alessandro Di Marco, Giovanni Chiola, and Giuseppe Ciaccio (Universita di Genova).

Analysis of Prioritized Scheduling of Assured Forwarding in DiffServ Architectures, Nzinga D. Kiameso, Hossam Hassanein (Queen’s University), and Hussein T. Mouftah (University of Ottawa).

Parallelized File Transfer Protocol (P-FTP), Shaleeza Sohail, Sanjay Jha, and Hossam ElGindy (University of New South Wales).

Poster Session (5:00 to 6:00)

Buffer Dumping Management for High-Speed Routers, Caroline Fayet (Groupe des Ecoles des Télécommunications) and André-Luc Beylot (IRIT/TeSA Lab).

Using OPNET to Evaluate SCI as an Avionics Real-time Network, Jiang Zhen (Beijing University of Aeronautics & Astronautics), Xu Yanjing (Chinese Academy of Sciences), and Xiong Huagang (Beijing University of Aeronautics & Astronautics).

Development of QoS Signaling Protocols in the Internet, Xiaoming Fu (University of Goettingen).

Design of A High-Speed Overlapped Round Robin (ORR) Arbiter, Kenji Yoshigoe, Kenneth J. Christensen (University of South Florida), and Allen Roginsky (IBM Corporation).

Simple, Scalable Protocols for High-Performance Local Networks, Rolf Riesen (Sandia National Laboratories) and Arthur B. Maccabe (University of New Mexico).

Design Considerations for High-Speed Internetworking among Compute Blades within a Blade Server Chassis, Ed Suffern and Norm Strole (IBM Corporation).

Improving Performance of SCTP over Broadband High-Latency Networks, Ishtiaq Ahmed, Okabe Yasuo, and Kanazawa Masanori (Kyoto University).
