

**12th IEEE Workshop on
Dependable Parallel, Distributed and Network-Centric Systems
DPDNS'07
Long Beach, California USA**

**Held in conjunction with the
21st IEEE International Parallel & Distributed Processing Symposium**

Friday, March 30, 2007

8.15 Opening Remarks

8.30 – 10.00 Session I: Dependability Modelling and Analysis of Distributed Systems

A Framework for Experimental Validation and Performance Evaluation in Fault Tolerant Distributed System

Hein Meling (University of Stavanger, Norway)

Dependability Modeling and Analysis of Dynamic Systems

Salvatore Distefano and Antonio Puliafito (University of Messina, Italy)

A Combinatorial Analysis of Distance Reliability in Star Network

Xiaolong Wu, Shahram Latifi and Yingtao Jiang (University of Nevada, Las Vegas, USA)

10.00 – 10.30 Coffee Break

10.30 – 11.30 Keynote Session

Trusted Peer-to-Peer and Grid Computing

Prof. Kai Hwang (University of Southern California, USA)

11.30 – 13.30 Lunch Break

13.30 – 15.00 Session II: Fault-Tolerant Parallel and Distributed Computing

ABARIS: An Adaptable Fault Detection/Recovery Component Framework for MPIs

Hideyuki Jitsumoto, Toshio Endo and Satoshi Matsuoka (Tokyo Institute of Technology, Japan)

Self Adapting Application Level Fault Tolerance for Parallel and Distributed Computing

Zizhong Chen, Ming Yang, Guillermo Francia (Jacksonville State University) and Jack Dongarra (University of Tennessee, Knoxville, USA)

The Design and Implementation of Checkpoint/Restart Process Fault Tolerance for Open MPI

Joshua Hursey, Timothy Mattox, Andrew Lumsdaine (Indiana University) and Jeffrey Squyres (Cisco Systems, Inc.)

15.00 – 15.30 Launch Break

15:30 – 17.00 Session III: Dependability Protocols and Algorithms

Fault-Tolerant Earliest-Deadline-First Scheduling Algorithm in Uniprocessor Embedded Systems

Hakem Beitollahi and Geert Deconinck (Katholieke Universiteit Leuven, Belgium)

Distributed Interval Voting with Node Failures of Various Types

Behrooz Parhami (University of California, Santa Barbara, USA)

Intelligent Dynamic Network Reconfiguration

Juan Ramon Acosta and Dimiter Avresky (North Eastern University, Massachusetts, USA)

17.00 – 18.30 Session IV: Dependable Distributed Storage Systems

IntraCache: An Interest group-based P2P Web Caching System

Huifang Cheng, Zhimin Gu and Junchang Ma (Beijing Institute of Technology, China)

Availability/Consistency Balancing Replication Model

Johannes Osrael, Lorenz Frohofer and Karl Goeschka (Vienna University of Technology, Austria)

Combining Compression, Encryption and Fault-tolerant Coding for Distributed Storage

Peter Sobe (University of Luebeck, Germany) and Kathrin Peter (Zuse Institute Berlin, Germany)

18.30 Concluding Remarks