

Wednesday, 11 February 2004				
8:45	<i>Registration</i>			
9:30	Welcome Address			
9:45	<p align="center">Invited talk Optimization Techniques for Irregular and Pointer-based Programs Emilio Zapata <i>Chair: Paolo Cremonesi</i></p>			
10:45	Coffee Break			
11:15	Short contributions: Distributed and Grid Systems <i>Chair: Patricia González</i>	Adaptive Distributed Execution of Java Applications B. Tournel (F), V. Felea (F)	Short contributions: Parallel Systems and Applications <i>Chair: Gamal Attiya</i>	A Cost-Effective Technique to Reduce HOL Blocking in Single-Stage and Multistage Switch-Based Networks J. Duato (E), J. Flich (E), T. Nachiondo (E)
11:30		Dynamically Scaling System Area Networks D. Avresky (USA), M. Marinov (USA), Y. Varoglu (USA)		Application of Data Mining for the Analysis of Internet Path Performance L. Borzemski (PL), L. Lubczynski (PL), Z. Nowak (PL)
11:45		Experiences on Adaptive Grid Scheduling of Parameter Sweep Applications E. H. Cuesta (E), I. M. Llorente (E), R. S. Montero (E)		Creating Scalable Traffic Simulation on Clusters A. Gourgoulis (UK), G. Terstyansky (UK), P. Kacsuk (H), S. Winter (UK)
12:00		Software Design Concepts of a Distributed Simulation Kernel B. I. Kumova (UK)		Improving the locality of the sparse matrix-vector product on shared memory multiprocessors J. C. P. Campos (E), D. B. Heras (E), F. J. F. Rivera (E), J. C. C. Dominguez (E)
12:15		Terminal-aware Grid resource and service discovery and B. Di Martino (I), N. Mazzocca (I), R. Aversa (I), S. Venticinque (I)		The effect of the degree of multistage interconnection networks on their performance: the case of delta and over-sized delta networks A. C. Aljundi (F), J. L. Dekeyser (F)
12:30	<i>Lunch</i>			
14:30	Distributed Systems 1 <i>Chair: Kaizar Amin</i>	An Approach to Massively Distributed Aggregate Computing on Peer-to-Peer Networks M. Jelasity (I), M. van Steen (NL), W. Kowalczyk (NL)		
15:00		RDMA Control Support for Fine-Grain Parallel Computations A. Smyk (PL), M. Tudruj (PL)		
15:30		Adaptive task farm implementation strategies M. Danelutto (I)		
16:00	Coffee Break			
16:30	Special Session on "Web Computing" <i>Chair: Konrad Kloeckner</i>	Collaborative Learning Patterns: Assisting the Development of component-based CSCL Applications A. Martínez (E), F. J. Álvarez (E), J. I. Asensio (E), M. Heredia (E), Y. A. Dimitriadis (E)		
17:00		Design, Specification, and Implementation of a Distributed Virtual Community System T. Gross (A)		
17:30		Study of communication in a Multi-Agent System in a Collaborative Learning Scenarios A. R. Alvarez (E), E. S. Vila (E), M. Lama Penin (E), R. Amorim (E), X. A. Vila Sobrino (E)		
18:00		Web services for Groupware in Distributed and Mobile Collaboration S. Dustdar (A)		
19:30	Departure of the conference bus to the Town Hall			
20:00	Visit to the Town Hall & Welcome cocktail			
21:00	Departure of the conference bus back to the "AC Hotel"			

Thursday, 12 February 2004

9:00

Invited talk
Supercomputing Technology Trends
Djordje Maric
Chair: Leszek Borzemski

10:00

Coffee Break

10:30

Advanced Applications
Chair: Wojtek Kowalczyk

Multiprocessing of the time domain analysis of thin-wire antennas and scatterers
A. Rubio Bretones (E), E. M. Garzón (E), I. García (E), S. Tabik (E)

Parallel Heuristic Search in Multilevel Graph Partitioning
C. Gil (E), F. G. Montoya (E), J. Ortega (E), R. Baños (E)

Parallelization and Comparison of Iterative Reconstruction Algorithms in Three-Dimensional Electron Microscopy
I. Garcia (E), J. J. Fernandez (E), J. M. Carazo (E), J. R. Bilbao-Castro

Time Series Forecasting based on Parallel Neural Networks
C. G. Puntonet (E), J. M. Górriz (E), J. Ortega (E), M. Aldasht (E), M. Salmerón (E)

Models and Tools
Chair: Anand Sivasubramaniam

Empirical Characterization of the Latency of Long Asynchronous Pipelines with Data-Dependent Module Delays
J. I. Hidalgo (E), J. Lanchares (E), J. M. Colmenar (E), O. Garnica (E), S.

Simulation Methodology for Decision Support Workloads
J. A. G. Monasterio (E), L. A. Amigo Navarro (E), V. Puente Varona (E)

Strongly Consistent Global State Detection for On-line Control of Distributed Applications
J. Borkowski (PL)

Workflow Principles Applied to Multi-Solution Analysis of Dependable Distributed Systems
F. Moscato (I), N. Mazzocca (I), V. Vittorini (I)

11:00

11:30

12:00

12:30

Lunch

14:30

Grid and Heterogeneous Environments
Chair: Salvatore Venturino

Abstracting the Grid
G. von Laszewski (USA), K. Amin (USA), M. Hategan (USA), N. Zaluzec (USA)

Parallelization of a Neural Net training program in a Grid environment
A. Gutierrez (E), F. Caverio (E), R. Menendez (E)

The Master-Slave Paradigm on Heterogeneous Systems: A Dynamic Programming Approach for the Optimal Mapping
D. González (E), F. Almeida (E), L. M. Moreno (E)

15:00

15:30

16:00

Coffee Break

16:30

Grid and Global Computing
Chair: Marco Danelutto

Exporting processing power of home embedded devices to Global Computing applications
D. Lioupis (GR), D. Psihogiou (GR), M. Stefanidakis (GR)

Optimal number of nodes for computation in grid environments
F. Granata (I), G. Casale (I), L. Muttoni (I), S. Zanero (I)

Performance Evaluation on Grids: Directions, Issues and Open Problems
G. Gombas (H), Z. Balaton (H), Z. Nemeth (H)

Languages, Compilers and Runtime Support Systems
Chair: Juan Touriño

Cooperative software multithreading to enhance utilization of embedded processor cores for network applications
A. Döring (CH), C. Albrecht (D), R. Hagenau (D)

Improving Cache Locality with Blocked Array Layouts
E. Athanasaki (GR), N. Koziris (GR)

SBASCO: Skeleton-based Scientific Components
B. Rubio (E), E. Soler (E), J. M. Troya (E), M. Díaz (E)

17:00

17:30

18:00

Parallel Computer Systems
Chair: Margarita Amor

Minimizing the Load Redistribution Cost in Cluster Architectures
F. F. Rivera (E), I. Pardines (E)

On the Performance of the POSIX I/O Interface to PVFS
A. Sivasubramaniam (USA), M. Vilayannur (USA), P. H. Carns (USA), R. B. Ross (USA), R. Thakur (USA)

Optimizing Bus Energy Consumption of On-Chip Multiprocessors Using Frequent Values
A. Sivasubramaniam (USA), C. Liu (USA), M. Kandemir (USA)

18:30

19:00

20:30

Departure of the conference bus to the "Playa Club Restaurant"

21:00

Conference Dinner at "Playa Club Restaurant"

Departure of the conference bus back to the "AC Hotel"

Friday, 13 February 2004

9:00

Invited talk
The impact of Morphware on Parallel Processing
Reiner Hartenstein
Chair: Pietro Manzoni

10:00

Coffee Break

10:30

Distributed Systems 2
Chair: Ahmad Chadi Aljundi

Group mobility impact over TCP and CBR traffic in Mobile Ad Hoc Networks
 J. C. Cano (E), P. Manzoni (E)

Atomic Page Update Methods for OpenMP-Aware Software DSM
 J. S. Kim (ROK), S. Ha (ROK), Y. S. Kee (ROK)

From Session Causality to Causal Consistency
 C. Sobaniec (PL), D. Wawrzyniak (PL), J. Brzezinski (PL)

Remote Management of Distributed Components
 E. Martel-Jordán (E), F. Guerra-Santana (E), J. Miranda-González (E), L. Hernández (E)

Performance Analysis
Chair: Ramon Doallo

A Library for Load Balancing in Master/Slave Applications on a LAN-WLAN Environment
 Á. Suárez (E), D. Sánchez (E), E. M. Macías (E)

Fast and Exact Dependence Analysis in a Multimedia Vectorizing Compiler
 P. Bulic (SLO), V. Gustin (SLO)

Performance Prediction Using an Application-Oriented Mapping Tool
 A. Ripoll (E), C. Roig (E), E. Luque (E), F. Guirado (E)

Static Task Scheduling Heuristic for Homogeneous Computing Environments
 J. Janecek (CZ), T. Hagraš (CZ)

11:00

11:30

12:00

12:30

Lunch

14:30

Network-based and Internet-based Computing 1
Chair: Shahram Dustdar

Jace : A Java environment for distributed asynchronous iterative computations
 J. Bahi (F), K. Mazouzi (F), S. Domas (F)

Making Community Work Aware
 K. Klöckner (D), S. Kolvenbach (D), W. Gräther (D)

Scheduling tasks sharing files on heterogeneous clusters
 A. Giersch (F), F. Vivien (F), Y. Robert (F)

15:00

15:30

16:00

Coffee Break

16:30

Network-based and Internet-based Computing 2
Chair: Zsolt Nemeth

Efficient Monitoring to Detect Wireless Channel Failures for MPI Programs
 A. Suárez (E), E. M. Macías (E), V. Sunderam (USA)

Xweb: A Framework for Application Network Deployment in a Programmable Internet Service Infrastructure
 L. Navarro Moldes (E), O. Ardaiz Villanueva (E)

The Multikey Web Cache Simulator:
 A. Pont Sanjuan (E), J. A. G. Salinas (E), J. Sahuquillo Borrás (E), L. G. Cárdenas Alexandres (E)

Performance and Optimization
Chair: Carsten Albrecht

A flexible and tunable route discovery mechanism for on-demand protocols
 C. T. Calafate (E), M. Pérez Malumbres (E), P. Manzoni (E)

Two Phase Algorithm for Load Balancing in Heterogeneous Distributed Systems
 G. Attiya (F), Y. Hamam (F)

Scheduling of Tiled Nested Loops onto a Cluster with a Fixed Number of SMP Nodes
 E. Koukis (GR), M. Athanasaki (GR), N. Koziris (GR)

17:00

17:30