Sept. 22 (Tue.)   Workshops

9:00 - 10:30 Sessions

Room F2: XRTS-2009 Workshop

Session XRTS-1: Keynote
Session Chair: Gerhard Fohler, Technical University (TU) Kaiserslautern, Germany

Multicore scheduling issues in Ericsson Mobile Platforms
        Johan Eker

Room F3: P2S2-2009 Workshop

Session P2S2-1: Opening Remarks and Invited Keynote
Session Chair: Pavan Balaji, Argonne National Laboratory, USA

Challenges for System Software on Exascale Platforms
        Pete Beckman

Room F4: SMECS-2009 Workshop

Session SMECS-1: Modeling of Dynamic Systems
Session Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

An OpenMP Approach to Modeling Dynamic Earthquake Rupture Along Geometrically
Complex Faults on CMP Systems
        Xingfu Wu, Benchun Duan, Valerie Taylor

Wedges Modeling for Electromagnetic Fields Diffracted by Two Horizontal Edges with
Arbitrary Angle
        Jiro Iwashige and Leonard Barolli

Modeling and Simulation of a Screw-Worm Gear Mechanical Transmission to Achieve its
Optimal Design under Imposed Constraints
        Claudiu Valentin Suciu, Hozumi Goto, Hisanori Abiru

Room F7: DOM-HetNetS-2009 Workshop
Session Chair: Natalia Kryvinska, Vienna University of Technology, Austria

Session DOM-HetNetS-1: Theoretical Design, Analysis and Optimization Framework

Decentralized Load Balancing for Improving Reliability in Heterogeneous Distributed
Systems
        Jorge E. Pezoa, Sagar Dhakal and Majeed M. Hayat

Adaptive Multipath Routing for Congestion Control in InfiniBand Networks
        Diego Lugones, Emilio Luque and Daniel Franco

Security and Routing Scoped IP Multicast Addresses
Imed Romdhani, Ahmed Al-Dubai, Mounir Kellil

An Approach to the Flexible Information/Service Workflow Managing in Distributed
Networked Architectures

I. Demydov, N. Kryvinska, M. Klymash

10:30 - 11:00 Coffee Break

11:00 - 12:30 Sessions

Room F2: XRTS-2009 Workshop

Session XRTS-2: Real Time Systems
Session Chair: Alan Burns, University of York, UK

How Hard is Partitioning for the Sporadic Model?
        Nathan Fisher

Real-time Divisible Load Theory: a Perspective
        Suriayati Chuprat, Shaharuddin Salleh, and Steve Goddard

Evaluation of Existing Schedulability Tests for Global EDF
        Marko Bertogna

Room F3:   P2S2-2009 Workshop

Session P2S2-2: Software for Large-scale Systems
Session Chair: Tom Peterka, Argonne National Laboratory, USA

Characterizing the Performance of Big Memory on Blue Gene Linux
        Kazutomo Yoshii, Kamil Iskra, P. Chris Broekema, Harish Naik and Pete
Beckman

Flat MPI vs. Hybrid: Evaluation of Parallel Programming Models for Preconditioned
Iterative
Solvers on "T2K Open Supercomputer"
        Kengo Nakajima

Analyzing Checkpointing Trends for Applications on Peta-scale Systems
        Harish Naik, Rinku Gupta and Pete Beckman

Room F4: SMECS-2009 Workshop

Session SMECS-2: Simulation of Dynamic Systems
Session Chair: Fatos Xhafa, Technical University of Catalonia, Spain

An Algorithm for Rough Surface Generation with Inhomogeneous Parameters
        Kazunori Uchida, Junichi Honda and Kwang-Yeol Yoon

CUDA Memory Optimizations for Large Data-Structures in the Gravit Simulator
        Jakob Siegel, Juergen Ributzka, Xiaoming Li

New Trends in Large Scale Distributed Systems Simulation
        Ciprian Dobre, Florin Pop, Valentin Cristea

Room F7: DOM-HetNetS-2009 Workshop
Session Chair: Christine Bauer, University of Vienna, Austria

Session DOM-HetNetS-2: Ubiquitous Networked Systems - Novel Design Approaches

System-level Virtualization and Mobile IP to Support Service Mobility
        Vittorio Manetti, Roberto Canonico, Giorgio Ventre, Ioannis Stavrakakis

SOI Framework for the Efficient Management of Complex Resource-Intensive
Applications on Constrained Devices
        N. Kryvinska, L. Auer, C. Strauss

Service Naming in Future Mobile Environments
        Nor Shahniza Kamal Bashah, Ivar Jorstad, Do van Thanh

12:30 - 14:00 Lunch

14:00 - 15:30 Sessions

Room F2:   XRTS-2009 Workshop

Session XRTS-3: Multicore and Manycore Systems
Session Chair: Steve Goddard, University of Nebraska, USA

Hardware Microkernels for Heterogeneous Manycore Systems
        Jason Agron and David Andrews

Transition-Aware Dynamic Voltage Scaling for Jitter-Controlled Real-Time
Scheduling: A Tree-Structured Approach
        Da-Ren Chen and Chiun-Chieh Hsu

Pfairness Applied to EDF to Reduce Migration Overheads and Improve Task
Schedulability in Multi-core Platforms
        K. Pradheep Kumar and A. P. Shanthi

Room F3:   P2S2-2009 Workshop

Session P2S2-3: Communication and I/O
Session Chair: Abhinav Vishnu, Pacific Northwest National Laboratory, USA

Designing and Evaluating MPI-2 Dynamic Process Management Support for InfiniBand
        Tejus Gangadharappa, Matthew Koop and Dhabaleswar K Panda

CkDirect: Unsynchronized One-Sided Communication in a Message-Driven Paradigm
        Eric Bohm, Sayantan Chakravorty, Pritish Jetley, Abhinav Bhatele and
Laxmikant Kale

Exploiting Latent I/O Asynchrony in Petascale Science Applications
        Patrick Widener, Matthew Wolf, Hasan Abbasi, Scott McManus, Mary Payne,
Patrick Bridges and Karsten Schwan

Gears4Net - An Asynchronous Programming Model
        Martin Saternus, Torben Weis, Sebastian Holzapfel and Arno Wacker

Room F4: SMECS-2009 Workshop

Session SMECS-3: Performance and Modeling of Distributed Systems
Session Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

Fast Autotuning Configurations of Parameters in Distributed Computing Systems Using Ordinal Optimization
Fan Zhang, Junwei Cao, Lianchen Liu and Cheng Wu

Towards a Side Access Free Data Grid Resource by Means of Infrastructure Clouds
David Huemer, A Min Tjoa, Marco Descher, Thomas Feilhauer and Philip Masser

Performance Evaluation of OpenMP and MPI Hybrid Programs on a Large Scale Multi-core Multi-socket Cluster, T2K Open Supercomputer
Miwako Tsuji and Mitsuhisa Sato

Room F7: DOM-HetNetS-2009 Workshop

Session DOM-HetNetS-3: Case Studies Crossing Design, Management, and Practical Implementations
Session Chair: Vittorio Manetti, University of Napoli, Italy

Software Probes: A Method for Quickly Characterizing Applications' Performance on Heterogeneous Environments
Alexandre Strube, Dolores Rexachs and Emilio Luque

Web Accessibility Issues for the Distributed and Interworked Enterprise Portals
Marie-Luise Leitner, Rudolf Hartjes, Christine Strauss

A Networked Ubiquitous Computing Environment for Damage Prevention - A Decision Support Framework for the Insurance Sector
Christine Strauss, Christian Stummer, Christine Bauer, Alexander Trieb

15:30 - 16:00 Coffee Break

16:00 - 17:30 Sessions

Room F2: XRTS-2009 Workshop

Session XRTS-4: Multiprocessors
Session Chair: Nathan Fisher, Wayne State University, USA

Global Multiprocessor Real-Time Scheduling as a Constraint Satisfaction Problem
Liliana Cucu-Grosjean and Olivier Buffet

Scheduling Sporadic Tasks on Multiprocessors with Mutual Exclusion Constraints
Arvind Easwaran and Bjorn Andersson

Multiprocessor Synchronization and Hierarchical scheduling
Ferhang Nemati, Moris Behnam, and Thomas Nolte

Room F3: P2S2-2009 Workshop

Session P2S2-4: Software for Multicore Architectures
Session Chair: Ron Brightwell, Sandia National Laboratory, USA

Efficient Parallel Implementation of Molecular Dynamics with Embedded Atom Method on Multi-core Platforms
        Changjun Hu, Yali Liu and Jianjiang Li

Open Source Software Support for the OpenMP Runtime API for Profiling
        Oscar Hernandez, Van Bui, Richard Kufrin and Barbara Chapman

Just-In-Time Renaming and Lazy Write-Back on the Cell/B.E.
        Pieter Bellens, Rosa Badia and Jesus Labarta

Sept. 23 (Wed.) Conference and Workshops
                        9:00 - 9:30 Opening
                        9:30 - 10:30 Keynote 2
                        10:30 -11:00 Coffee Break

                        11:00 - 12:30 Sessions

Room F2: SRMPDS-2009 Workshop

Session SRMPDS-1: Resource Scheduling
Session Chair: Rajkumar Kettimuthu, Argonne National Laboratory and The University of Chicago, USA

A Performance Evaluation of Network-aware Grid Meta-schedulers
        Agustin Caminero, Omer Rana, Blanca Caminero, Carmen Carrion

Load Balancing Concurrent BPEL Processes by Dynamic Selection of Web Service Endpoints
        Marvin Ferber, Sascha Hunold and Thomas Rauber

The Owner Share Scheduler for a Distributed System
        Jose Nelson Falavinha Jr, Miron Livny, Aleardo Manacero Jr and Daniel Bradley

Room F3: NGWMN-2009 Workshop

Session NGWMN-1: Wireless Networks Applications and Resource Allocation
Session Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

On the Design of a Water Quality Wireless Sensor Network (WQWSN): an Application to Water Quality Monitoring in Malawi
        Marco Zennaro, Athanasios Floros, Gokhan Dogan, Tao Sun, Zhichao Cao, Chen Huang, Manzoor Bahader, Herve Ntareme

Dynamic Control and Resource Allocation in Wireless-Infrastructured Distributed Cellular Networks with OFDMA
        Lei You Ping Wu, Mei Song, Yong Zhang

Improvement of Messages Delivery Time on Vehicular Delay-Tolerant Networks
        Vasco N. G. J. Soares, Joel J. P. C. Rodrigues, Paulo Salvador Ferreira, and Antoio Nogueira

Room F4: ADPNA-2009 Workshop

Session ADPNA-1: Programing Models
Session Chair: Makoto Takizawa, Seikei University, Japan

Optimizing Multi-Core MPI Collectives with SMARTMAP
        Ron Brightwell and Kevin Pedretti

On the Automatic Detection of Heap-induced Data Dependences with Interprocedural
Shape Analysis
        Adrian Tineo, Francisco Corbera, Angeles Navarro, Rafael Asenjo and Emilio
L. Zapata

Comparing and Optimising Parallel Haskell Implementations on Multicore
        Jost Berthold, Simon Marlow, Kevin Hammond and Abyd Al-Zain

ParalleX: An Advanced Parallel Execution Model for Scaling-Impaired Applications
        Hartmut Kaiser, Maciek Brodowicz and Thomas Sterling

Room F7:   MCSOC-2009 Workshop

Session MCSOC-1: CAD and NoC
Session Chair: Abdel Ejnioui, University of South Florida Polytechnic, USA

A Heuristic (Delta, D) Digraph to Interpolate Between Hypercube and De Bruijn
Topologies for Future on Chip Interconnection Networks
        Samer Damaj, Thierry Goubier, Frederic Blanc and Bernard Pottier

Balanced Dimension Order Routing for k-ary n-cubes
        Jose Miguel Montana Aliaga, Michihiro Koibuchi, Hiroki Matsutani and
Hideharu Amano

Evaluation of d-mesh Interconnect for SoC
        Roman Trobec

Resource Sharing in Networks-on-Chip of large many-core Embedded Systems
        Fadi Sibai

                         12:30 - 14:00 Lunch

                         14:00 - 15:30 Sessions

Room F2: SRMPDS-2009 Workshop

Session SRMPDS-2: Resource Management
Session Chair: Rajkumar Kettimuthu, Argonne National Laboratory and The University
of Chicago, USA

Optimizing Migration of Virtual Machines across Data-Centers
        Sumit Kumar Bose and Srikanth Sundarrajan

Autonomic SLA Management in Federated Computing Environments
        Pawel Rubach and Michael Sobolewski

SenSORCER: A Framework for Managing Sensor-Federated Networks
        Sujit Bhosale and Michael Sobolewski

Room F3 (89) NGWMN-2009 Workshop

Session NGWMN-2: Pervasive and P2P Networks
Session Chair: Mieso Denko, University of Guelph, Canada

A Distributed Decision-making Mechanism for Wireless P2P Networks
        Xu Wu, Jingsha He and Fei Xu

Link and Route Availability for Inter-working Multi-hop Wireless Networks
        Oladayo Salami, Antoine Bagula, H. Anthony Chan

Audio-based Self-organizing Authentication for Pervasive Computing: A Cyber-Physical
Approach
        Su Jin Kim, Sandeep K.S. Gupta

Room F4: ADPNA-2009 Workshop

Session ADPNA-2: Distributed and Parallel Algorithms
Session Chair: Ron Brightwell, Sandia National Laboratories, USA

Exploiting Fine-Grained Pipeline Parallelism for Wavefront Computations on Multicore
Platforms
        Guiming Wu, Yong Dou, Miao Wang and Fei Xia

Network Anomaly Detection Using Dissimilarity-based One-class SVM Classifier
        Jun Ma, Guanzhong Dai and Zhong Xu

Biodoop: Bioinformatics on Hadoop
        Simone Leo, Federico Santoni and Gianluigi Zanetti

A Scalable Parallel Approach for Peptide Identification from Large-scale Mass
Spectrometry Data
        Gaurav Kulkarni, Ananth Kalyanaraman, William R. Cannon and Douglas Baxter

Room F7: MCSOC-2009 Workshop

Session MCSOC-2: Reconfigurable Multicore

Session Chair: Fadi Sibai, UAE University, UAE

Supporting Multitasking of Pipelined Computations on Embedded Parallel Processor
Arrays
        Dimitris Syrivelis and Spyros Lalis

System Integration of Tightly-Coupled Reconfigurable Processor Arrays and Evaluation
of Buffer Size Effects on Their Performance
        Vahid Lari, Frank Hannig and Jogen Teich

Runtime Adaptation in Reconfigurable System-on-Chips
        Abdel Ejnioui

Towards a Component-based Observation of MPSoC
        Carlos Hernan Prada Rojas, Vania Marangozova-Martin, Kiril Georgiev,
Jean-Francis Meaut and Miguel Santana

15:30 - 16:00 Coffee Break

16:00 - 17:30 Sessions

Room F2: DXP-2009 Workshop

Session 1: Distributed XML Processing
Session Chair: Alfredo Cuzzocrea, ICAR-CNR & University of Calabria, Italy

Collaborative Clustering of XML Documents
        Sergio Greco, Francesco Gullo, Giovanni Ponti, Andrea Tagarelli

Mining Workflow Processes from XML-based Distributed Workflow Events Logs
        Kwanghoon Kim

A Distributed Concurrency Control Mechanism for XML Data
        Leonardo O. Moreira, Flavio R. C. Sousa, Javam C. Machado

Anonymizing XML Data Cubes in Distributed OLAP Environments
        Alfredo Cuzzocrea, Elisa Bertino

Room F4:   ADPNA-2009 Workshop

Session ADPNA-3: Mobile and P2P Computing
Session Chair: Rafael Asenjo Plaza, University of Malaga, Spain

A Security-aware Approach to JXTA-Overlay Primitives
        Joan Arnedo-Moreno, Keita Matsuo, Leonard Barolli and Fatos Xhafa

TARC: A Novel Topology Adaptation Algorithm based on Reciprocal Contribution in
Unstructured P2P Network
        Cai Chen, Sen Su, Kai Shuang and Fangchun Yang

Testdriven Service Discovery in Mobile Environments
        Ingrid Duda and Oliver Hummel

A Budget-based Cost-effective Incentive Model
        Guiyi Wei, Athanasios Vasilakos, Mande Xie and Yun Ling

Room F7: MCSOC-2009 Workshop

Session MCSOC-3: Low Power Design of Multicore
Session Chair: Michihiro Koibuchi, National Institute of Informatics, Japan

Gating and Serializing the Data Path of CPU for Low Power Consumption
        Rajesh Kannan Megalingam, Venkat Krishnan B, Rahul Srikumar, Mithun M and
Vineeth Sarma

Software and Hardware Design Issues for Low Complexity High Performance Embedded
Processor
        Masashi Masuda, Abderazek Ben Abdallah

An Accurate and Energy Efficient Fetch Direction Orientation Mechanism for Trace
Cache
        Deze Zeng, Minyi Guo, Xin Liu, Song Guo and Hai Jin

The Rendezvous Mechanism for the Multi-Core AMBA System
        Jih-Ching Chiu, Kai-Ming Yang and Mu-Chi Chang

                        18:30 -   Reception

Sept. 24 (Thu.)   Conference and Workshops
                        9:00 - 10:00 Keynote 3
                       10:00 - 10:30 Coffee Break

                       10:30 - 12:30 Sessions

Room F4: ADPNA-2009 Workshop

Session ADPNA-4: Distributed and Parallel Computing and Applications
Session Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

Estimation of Parameters Sensitivity for Scientific Workflows
        Fakhri Alam Khan, Yuzhang han, Sabri Pllana and Peter Brezany

Realiable and Efficient Agreement Protocol in Fully Distributed Systems
        Ailixier Aikebaier, Tomoya Enokido, and Makoto Takizawa

Distributed Cluster Architecture for Increase Energy Efficiency in Cluster Systems
        Ailixier Aikebaier, Tomoya Enokido and Makoto Takizawa

Global Variable Partition with Virtually Shared Scratch Pad Memory to Minimize
Schedule Length
        Meikang Qiu, Lei Zhang and Minyi Guo

Assignment Algorithm for Energy Minimization on Parallel Machines
        Jaeyeon Kang and Sanjay Ranka

                       12:30 - 14:00 Lunch

                       14:00 - 15:30 ICPP-2009 Sessions

                       15:30 - 16:00 Coffee Break

                       16:00 - 17:30 ICPP-2009 Sessions

                       19:00 - Banquet