



**IPDPS 2012 PhD Forum**  
**Research Projects Selected for Poster Presentation**  
**Thursday, May 24th, All Day**

<b>ALGORITHMS</b>	
1	<b>Communication-Optimal Parallel N-body Solvers</b> Aparna Chandramowlishwaran (Georgia Institute of Technology, USA)
2	<b>Modeling and Analysis for Performance and Power</b> Jee Choi; Richard W Vuduc (Georgia Institute of Technology, USA)
3	<b>Fixed-Priority Multiprocessor Scheduling: Critical Instant, Response Time and Utilization Bound</b> Guan Nan; Wang Yi (Uppsala University, Sweden)
4	<b>Privacy Preserving Techniques for Location Based Services in Mobile Networks</b> Xinxin Liu; Xiaolin Li (University of Florida, USA)
5	<b>Energy-aware scheduling: models and complexity results</b> Guillaume Aupy; Anne Benoit; Yves Robert (ENS Lyon, France)
6	<b>Fault Tolerance in P2P-Grid Environments</b> Wang Huan; Hidenori Nakazato (Waseda University, Japan)
7	<b>A Fast Repair Code Based on Regular Graphs for Distributed Storage System</b> Yan Wang (Fudan University, P.R. China)
<b>APPLICATIONS</b>	
8	<b>Inference of Huge Trees under Maximum Likelihood</b> Fernando Izquierdo-Carrasco; Alexandros Stamatakis (Heidelberg Institute for Theoretical Studies, Germany)
9	<b>Multithreaded Algorithms for Matching in Graphs with Application to Data Analysis in Flow Cytometry</b> Ariful Azad (Purdue University, USA)
10	<b>Sequence Alignment on Massively Parallel Heterogeneous Systems</b> Aleksandr Drozd; Naoya Maruyama; Satoshi Matsuoka (Tokyo Institute of Technology, Japan)
11	<b>Subgraph Querying in Relational Networks: a MapReduce Approach</b> Zhao Zhao (Virginia Tech, USA)
12	<b>MapReduce Framework Optimization via Performance Modeling</b> Lijie Xu (Institute of Software, Chinese Academy of Sciences, P.R. China)
13	<b>Integrated Parallelization of Computations and Visualization for Large-scale Applications</b> Preeti Malakar; Vijay Natarajan; Sathish Vadhiyar (Indian Institute of Science Bangalore, India)
14	<b>Identity Based Schemes for Securing Mobile Ad Hoc Networks</b> Uttam Ghosh (Indian Institute of Technology, Kharagpur, India)
15	<b>QoS-Oriented Data Dissemination in VANETs</b> LiFeng Zhang; Beihong Jin (Institute of Software, Chinese Academy of Sciences, P.R. China)
16	<b>Coverage-aware Geocast Routing in Urban Vehicular Networks</b> Ruobing Jiang; Yanmin Zhu (Shanghai Jiao Tong University, P.R. China)
<b>ARCHITECTURE</b>	
17	<b>Towards Modelling Parallelism and Energy Performance of Multicore Systems</b> Bogdan Marius Tudor; Yong-Meng Teo (National University of Singapore, Singapore)
18	<b>Parallel Circuit Simulation on Multi/Many-core Systems</b> Xiaoming Chen; Yu Wang; Huazhong Yang (Tsinghua University, P.R. China)
19	<b>On the Correctness of Mixing Lazy and Eager Version Management in Transactions</b> Lihang Zhao; Jeffrey Draper (University of Southern California/ Information Sciences Institute, USA)
<b>SOFTWARE</b>	
20	<b>Characterizing Load and Communication Imbalance in Large-Scale Parallel Applications</b> David Böhme; Felix Wolf (German Research School for Simulation Sciences, Germany)
21	<b>Autonomous and Energy-Aware Management of Large-Scale Cloud Infrastructures</b> Eugen Feller; Christine Morin (INRIA, France)
22	<b>Minimalistic Adaptive Resource Management for Multi-tier Applications Hosted on Clouds</b> Waheed Iqbal (Asian Institute of Technology, Thailand)
23	<b>Designing Flexible Resource Rental Models for Implementing HPC-as-a-Service in Cloud</b> Han Zhao; Xiaolin Li (University of Florida, USA)
24	<b>Generalizing the Utility of GPUs in Large-Scale Heterogeneous Computing Systems</b> Shucai Xiao; Wu-chun Feng (Virginia Tech, USA)

(Note: Author listed first is PhD student who will be presenting poster.)