At a glance

*Management infrastructure tools (membership, replication, leader election, locking, quorums, consistency, fault-tolerance, ...)*

Scalable storage in a datacenter and across

Tools and Abstractions for Robust Distributed Systems I
3. A Simple Totally Ordered Broadcast System. Benjamin Reed, Flavio P. Junqueira, Yahoo! Research
5. Towards Distributed Software Transactional Memory Systems. Paolo Romano, Nuno Carvalho, INESC-ID/IST, Luis Rodrigues, U of Lisboa

Tools and Abstractions for Robust Distributed Systems II
7. Building distributed applications using Sinfonia. Marcos Aguilera, MSR

Byzantine Fault Tolerance I
9. Low-latency Access to Robust Amnesic Storage. Dan Dobre, Matthias Majuntke, and Neeraj Suri, TUD

Byzantine Fault Tolerance II
10. BFT: the Time is Now. Allen Clement, Mirco Marchetti, Edmund Wong, Lorenzo, Alvisi, Mike Dahlin, UT Austin
11. Reducing the Costs of Large-Scale BFT Replication. Marco Serafini, and Neeraj Suri, TUD
12. The Next 700 BFT Protocols. Rachid Guerraoui, EPFL, Vivien Quema, CNRS, Marko Vukolic, EPFL
Scalable data sharing, event notification, multicast, reliable message transport, pub/sub

Scalable Event Notification
13. Interest-Based Peer Clustering for Scalable Overlay-Based Multicast: SpiderCast and Gravity. Gregory Chockler, IBM Research, Sarunas Girdijauskas, EPFL, Roie Melamed, IBM Research, Yoav Tock, IBM Research, Roman Vitenberg, U of Oslo

Scalable Communication Primitives
15. Content-Based Networking: Ideas for Scalable Content-Based Publish/Subscribe Communication (Some Old, Some New). Antonio Carzaniga, U of Lugano
17. Heterogeneous Gossiping. Davide Frey, INRIA, Rachid Guerraoui, EPFL, Anne-Marie Kermarrec, INRIA, Maxime Monod, EPFL, Vivien Quema, CNRS

Aggregation, monitoring, and resource management

Resource Management in a Datacenter
18. Decentralized Approaches to Performance/Resource Optimization. Mike Spreitzer, IBM Research
19. Efficient On-Demand Operations in Dynamic Distributed Infrastructures. Steven Y. Ko, and Indranil Gupta, UIUC

Aggregation and Monitoring
21. Distributed Slicing. Anne-Marie Kermarec, INRIA
22. Experience with Gossip-Based Monitoring for Datacenter Management, Robbert van Renesse, Cornell
23. Decentralized Real-Time Monitoring of Network-Wide Aggregates. Rolf Stadler, KTH

* Extended slot
LADIS 2008 Program

Monday, September 15

8:30 Registration, gathering, opening remarks (please depart hotel at 8:00 to be on time)

9:00 – 10:00 Keynote 1: Gennaro Cuomo, IBM Fellow, VP, WebSphere CTO

10:00 Coffee Break

Invited Industrial Talk
10:30 – 11:00 eBay's Scalability Odyssey: Growing and Evolving a Large eCommerce Site, Franco Travostino and Randy Shoup, eBay Inc.

Technical Session 1: Scalable storage and data management in a datacenter and across
11:00 – 11:30 Smoke and Mirrors: Shadowing Files at a Geographically Remote Location Without Loss of Performance. Hakim Weatherspoon, Lakshmi Ganesh, Tudor Marian, Mahesh Balakrishnan, and Ken Birman, Cornell
11:30 – 12:00 A Novel Data Placement Model for Highly Available Storage Systems. Venugopalan Ramasubramanian, MSR

12:00 Lunch

Technical Session 2: Tools and Abstractions for Robust Distributed Systems I
1:15 – 1:45 A Simple Totally Ordered Broadcast System. Benjamin Reed, Flavio P. Junqueira, Yahoo! Research
2:15 – 2:45 Towards Distributed Software Transactional Memory Systems. Paolo Romano, Nuno Carvalho, INESC-ID/IST, Luis Rodrigues, U of Lisboa

2:45 – 3:00 Coffee Break

Technical Session 3: Aggregation and monitoring
3:00 – 3:30 Distributed Slicing. Anne-Marie Kermarec, INRIA
3:30 – 4:00 Experience with Gossip-Based Monitoring for Datacenter Management, Robbert van Renesse, Cornell
4:00 – 4:30 Decentralized Real-Time Monitoring of Network-Wide Aggregates. Rolf Stadler, KTH

4:30 – 4:45 Coffee Break

Technical Session 4: Byzantine Fault Tolerance I
5:15 – 5:45 Low-latency Access to Robust Amnesic Storage. Dan Dobre, Matthias Majuntke, and Neeraj Suri, TUD

5:45 Posters and demo in the cafeteria annex, hors d'oeuvres, light refreshments
Tuesday, September 16

8:45 Arrival at IBM site

9:00 – 10:00 **Keynote 2**: James Hamilton, Microsoft Research, Data Center Futures Team

10:00 Coffee Break

**Technical Session 5: Byzantine Fault Tolerance II**
10:30 – 11:00 BFT: the Time is Now. Allen Clement, Mirco Marchetti, Edmund Wong, Lorenzo, Alvisi, Mike Dahlin, UT Austin
11:00 – 11:30 Reducing the Costs of Large-Scale BFT Replication. Marco Serafini, and Neeraj Suri, TUD
11:30 – 12:00 The Next 700 BFT Protocols. Rachid Guerraoui, EPFL, Vivien Quema, CNRS, Marko Vukolic, EPFL

12:00 Lunch

**Technical Session 6: Scalable Event Notification**
1:15 – 1:55 Interest-Based Peer Clustering for Scalable Overlay-Based Multicast: SpiderCast and Gravity. Gregory Chockler, IBM Research, Sarunas Girdjauskas, EPFL, Roie Melamed, IBM Research, Yoav Tock, IBM Research, Roman Vitenberg, U of Oslo

2:35 Coffee Break

**Technical Session 7: Resource Management in a Data Center**
3:00 – 3:30 Decentralized Approaches to Performance/Resource Optimization. Mike Spreitzer, IBM Research
3:30 – 4:00 Efficient On-Demand Operations in Dynamic Distributed Infrastructures. Steven Y. Ko, and Indranil Gupta, UIUC
4:00 – 4:30 Configuration-Space Performance Anomaly Depiction. Christopher Stewart, and Kai Shen, Rochester

5:00 *Departure for the Hudson River Dining Cruise*
Wednesday, September 17

8:45 Arrival at IBM site

Technical Session 8: Tools and Abstractions for Robust Distributed Systems II
9:00 – 9:30 Write Markers for Probabilistic Quorum Systems. Michael G. Merideth, CMU, Michael K. Reiter, UNC
9:30 – 10:00 Building distributed applications using Sinfonia. Marcos Aguilera, MSR

10:00 Coffee Break

Technical Session 9: Scalable Communication Primitives
10:30 – 11:00 Content-Based Networking: Ideas for Scalable Content-Based Publish/Subscribe Communication (Some Old, Some New). Antonio Carzaniga, U of Lugano
11:00 – 11:30 Dr. Multicast: Rx for Datacenter Communication Scalability. Ymir Vigfusson, Hussam Abu-Libdeh, Mahesh Balakrishnan, Ken Birman, Cornell, Yoav Tock, IBM Research
11:30 – 12:00 Heterogeneous Gossiping. Davide Frey, INRIA, Rachid Guerraoui, EPFL, Anne-Marie Kermarrec, INRIA, Maxime Monod, EPFL, Vivien Quema, CNRS

12:00 Concluding remarks, adjourn