2011 Research Track Agenda

Thursday, May 26 – Friday, May 27, 2011

Chair: André Brinkman, Ethan Miller & David Pease

Meeting is Located in Grand Ballroom A
Thursday, May 26

7:30 AM – 9:00 AM	**Breakfast / Vendor Exhibits** **Located in Ballroom Foyer**
7:30 AM - 5:30 PM	**Registration/Hospitality Desk** **Located in Ballroom Foyer**
9:00 AM - 9:15 AM	**Opening Remarks**
9:15 AM - 10:45 AM	**Invited Talk-** ***Preserving Bread Crumbs*** *Mary G. Baker, HP Labs Palo Alto*
10:45 AM - 11:15 AM	**AM Break / Vendor Exhibits** **Located in Ballroom Foyer**
11:15 AM - 12:45 PM	**Session 1: Workload Characterization and Steering -** Session Chair: *Ron A. Oldfield* Understanding and Improving Computational Science Storage Access through Continuous Characterization - *Philip Carns, Kevin Harms, William Allcock, Charles Bacon, Samuel Lang, Robert Latham and Robert Ross* Performance Modeling and Analysis of Flash-based Storage Devices - *Howie Huang, Shan Li, Alex Szalay and Andreas Terzis* You Choose: A Performance Interface Enabling Convenient and Efficient QoS Support for Consolidated Storage Systems - *Xuechen Zhang, Yuehai Xu and Song Jiang*
12:45 PM - 2:00 PM	**Lunch** **Located in Central City**
2:00 PM - 3:30 PM	**Session 2: Finding Data in Flash -** Session Chair: *Ethan L. Miller* S-FTL: An Efficient Address Translation for Flash Memory by Exploiting Spatial Locality - *Song Jiang, Lei Zhang, Xinhao Yuan, Hao Hu and Yu Chen* Hot Data Identification for Flash-based Storage Systems Using Multiple Bloom Filters - *Dongchul Park and David H.C. Du* WAFTL: A Workload Adaptive Flash Translation Layer with Data Partition - *Qingsong Wei, Bozhao Gong, Suraj Pathak, Bharadwaj Veeravalli, Lingfang Zeng and Kanzo Okada*
3:30 PM - 4:00 PM	**PM Break / Vendor Exhibits** **Located in Ballroom Foyer**
4:00 PM - 5:30 PM	**Session 3: Short Paper -** Session Chair: *Dean Hildebrand*
6:00 PM - 7:30 PM	**Posters and Reception** **Located in Central City**

Friday, May 27

7:30 AM – 9:00 AM	**Breakfast** **Located in Ballroom Foyer**
7:30 AM - 4:00 PM	**Registration/Hospitality Desk** **Located in Ballroom Foyer**
9:00 AM - 10:30 AM	**Session 4: Interfaces and Virtualization -** Session Chair: *Brent Welch* Flexible, Modular File Volume Virtualization in Loris - *Raja Appuswamy, David C. Van Moolenbroek and Andrew S. Tanenbaum* Object-based SCM: An Efficient Interface for Storage Class Memories - *Yangwook Kang, Jingpei Yang and Ethan L. Miller* Design and Evaluation of Oasis: An Active Storage Framework based on T10 OSD Standard - *Yulai Xie, Kiran-Kumar Muniswamy-Reddy, Dan Feng, Darrell D.E. Long, Yangwook Kang, Zhongying Niu and Zhipeng Tan*
10:30 AM – 11:00 AM	**AM Break** **Located in Ballroom Foyer**
11:00 AM – 12:30 PM	**Panel Discussion: "How to do good research on storage"**
12:30 PM – 2:00 PM	**Lunch** **Located in Central City**
2:00 PM – 3:30 PM	**Session 5: Green Storage and the Cloud -** Session Chair: *Shankar Pasupathy* Reliability-Aware Energy Management for Hybrid Storage System - *Wes Felter, Anthony Hylick and John Carter* Semi-RAID: A Reliable Energy-Aware RAID Data Layout for Sequential Data Access - *Li Xiao, Tan Yu-An and Sun Zhizhuo* ZoneFS: Stripe Remodeling in Cloud Data Centers - *Lanyue Lu, Dean Hildebrand and Renu Tewari*
3:30 PM – 4:00 PM	**PM Break** **Located in Ballroom Foyer**
4:00 PM – 5:30 PM	**Session 6: Making Flash Faster and Cleaner -** Session Chair: *Matthew O'Keefe* Harmonia: A Globally Coordinated Garbage Collector for Arrays of Solid-state Drives - *Youngjae Kim, Sarp Oral, Galen M. Shipman, Junghee Lee, David A. Dillow and Feiyi Wang* Rejuvenator: A Static Wear Leveling Algorithm for NAND Flash Memory with Minimized Overhead - *Muthukumar Murugan and David H. C. Du* Boosting Random Write Performance for Enterprise Flash Storage Systems - *Tao Xie and Janak Koshia*
5:30 PM – 5:45 PM	**Closing Remarks**

Short Papers