Topics and participants

1. Mapreduce use in HPC - 11

Parallel programming models and heterogeneous scheduling (GPUs) - 11

Data management including File IO in parallel systems/HPC – 1111

* Virtualization as subtheme

Yutong Lu, Qiu, Dinda, Parashar, Figueiredo

1. Large-scale FT – 1

Automatic fault identification in source code - 1

Risk assessment in software -11

Self-healing -1

Dinda, Fortes, Parashar, Lu, Yuming, Lorenzo

1. Cloud-oriented infra/structure for HPC -1

Energy concerns – 11

Middleware/runtime and programming environments – 1

Cloud-based systems - 1

Virtualization layer for HPC – 1

Dinda, Lu, Mingyi, Figueiredo

Other topics

1. Source-to-source translation – 1 – Yuming
2. Social networking – 1 Figueiredo, Feliz, Lorenzo, Yafei Dai (suggested)
3. Autonomic systems -1 Fortes, Figueiredo

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Benefits

Working w/smart people

Visits/exchanges, Opportunities to exchange students, Funding mechanisms becoming available

Improved research problem/area of common interest

Help focus on specific topic

Share and access to applications, code bases, systems, and data sets (e.g. hpc, social networks…) for developing and testing new ideas

* Diverse set of design points
* Unique complementary real and prototype systems

International collaboration valued by project/laboratory evaluators

Personal career advancement

Improved educational opportunities for students

Tracking research and funding trends

Enlarge and extend research groups and impact of research results

Enable larger courses of research while mitigating risk

Improve idea generation and exchange and tech transfer

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Mechanisms

* Research questions as core of research proposal
  + An organized approach is more sustainable
* Workshop report to IEEE Computer
  + At the right time
* Exchanges/short visits (students, scholars) to pursue specific questions
* Short term: joint research paper/experiment/project/testbed around a research question
* Google+/social network communication, list, blog for match-making, plan for proposals
* Leverage supplemental funding/SEGR
* Face-to-face meetings, long(er) student exchanges (individually and in grops)
* Existing joint proposal mechanisms
* Virtual meetings with longer presentations and other published to learn about each other
* Ad-hoc or organized meetings collocated with existing conferences, such as SC
  + BoF (ask Bill)
* Technical workshops with long life (1-week duration), and the associated organization
* J oint student supervision