

Panel: Summary Findings and Recommendations from Peta(fl)Ops II

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Petaflops II

February 19, 1999

Santa Barbara, California

Panel Participants

- **Paul Messina** **Paul.Messina@dp.doe.gov**
- **David Bailey** **dhb@nerosc.gov**
- **Rick Stevens** **stevens@mcs.anl.gov**
- **Dan Reed** **reed@cs.uiuc.edu**
- **Thomas Sterling** **tron@cacr.caltech.edu**
- **A. Ray Miller** **arm@romulus.ncsc.mil**
- **Paul H. Smith** **phsmith@dp.doe.gov**

Questions to Panelists

- 1. What are the major results and findings from this conference?**
- 2. What open issues remain to be resolved before sufficient confidence can exist to implement petaflops systems?**

Questions to Panelists

- 3. What are the major obstacles to the implementation of petaflops scale systems? What new areas need to be explored in preparation for building such systems?**
- 4. What recommendations would you make to ensure that effective petaflops scale systems become available in the nearest possible time frame?**

Rules of Engagement

- The chair will give a brief position statement, introduce the panelists, and present/describe the questions
- Each panelist will provide a 6 minute response to the questions
 - Everyone should feel they have the widest latitude to say constructive/provocative things
- Open floor for audience participation should be ~30 minutes

Philosophy

Our plans miscarry because they have no aim. When a man does not know what harbor he is making for, no wind is the right wind.

– Seneca

Philosophy

**Make no little plans They have no
magic to stir men's blood.**

- Daniel H. Burnham, Architect and City Planner
Extraordinaire

My Thoughts

- **We need an enduring High-end Computing Program**
 - lots of good research in Computer Science, computational methods, etc., will be carried out regardless
 - but we need the blend of interests, skills, and viewpoints that this conference had

My Thoughts

- To me it is obvious that there are interesting and challenging R&D issues in pursuing ever higher computing capability for science and engineering
- We need to transition to both focused research (as opposed to debates in panel sessions) and to multidisciplinary, team **projects** with real goals, objectives, and milestones