

Session VII: Co-Design Panel

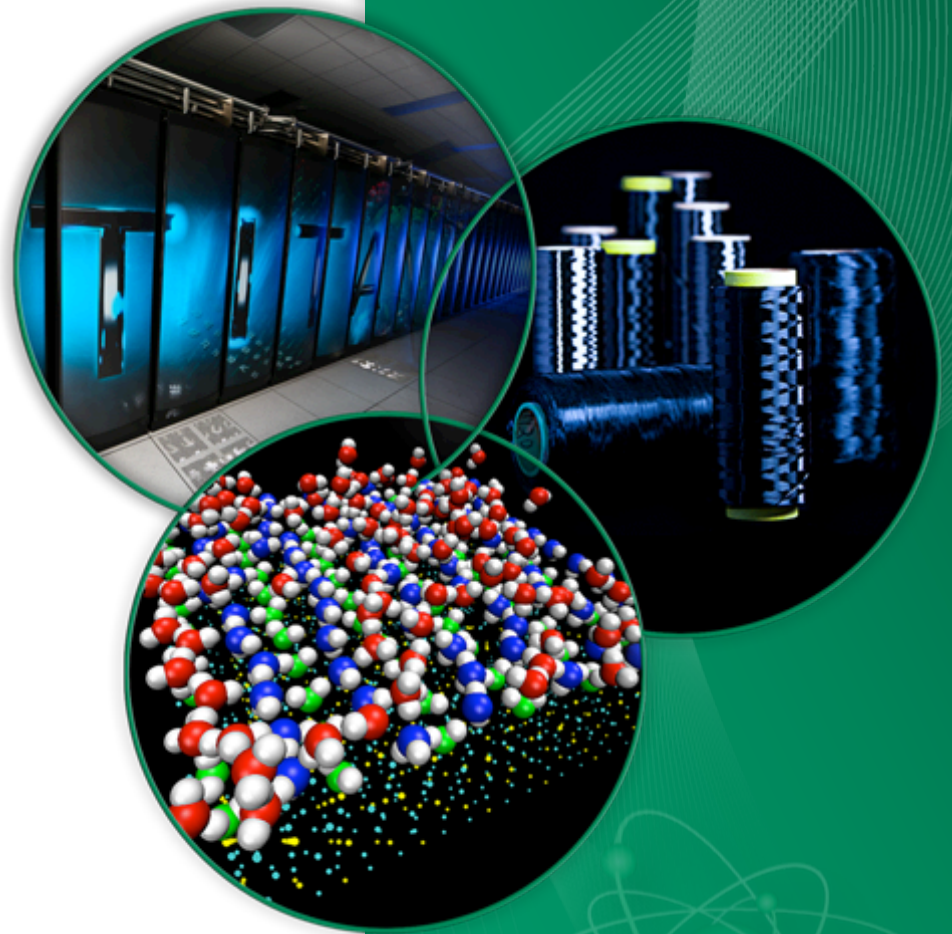
Barney Maccabe, chair

Division Director
Computer Science and Mathematics

SOS18

18-20 Mar 2014

St. Moritz, Switzerland



Presentations

- “Algorithm Co-design with with Architecture and OS”
 - Al Geist, Oak Ridge National Laboratory
- “Two Years of Co-design”
 - Si Hammond, Sandia National Laboratory
- “Portals as a Case Study for Software/Hardware Co-design”
 - Ron Brightwell, Sandia National Laboratories

Presented yesterday evening:

- “Experiences with Co-design in Academic and Industrial Projects”
 - David Müller, SCS AG

Considerations... “I’m a Computer Scientist and I’m here to help...”

- How do you address deep (e.g., algorithmic) changes to applications that may be necessitated for architectural change?
 - To what extent are applications an impediment to innovation in systems?
- How do you engage application teams?
 - Talk to them regularly?
 - Use mini-apps?
 - Run applications directly?
 - Embed application developers in your CS teams?
- To what extent are mini-apps an effective interface between application teams and computer scientists?
 - How do you prevent abuse?
 - How could they be improved?
 - Are there better interfaces?