

## **BoF: Fundamental Computer Science for e-Science**

A Birds of a Feather (BoF) sessions at the forthcoming e-Science All Hands Meeting 2004 (AHM2004 – see <http://www.allhands.org.uk/>) in Nottingham, 31<sup>st</sup> August to 3<sup>rd</sup> September, (6pm to 8pm) will be Computer Science and e-Science.

EPSRC have issued a second call for proposals for **the Computer Science Challenges to Emerge from e-Science** (see <http://www.epsrc.ac.uk/website/commonpages/downloads.aspx?CID=10603&ZoneID=3&MenuID=116>). The intention is to encourage adventurous, significant and well integrated research to address the challenges of making large distributed systems:

- 1) easily usable, deployable and programmable, and
- 2) well engineered, reliable, predictable, affordable and scalable.

The envisaged research will draw on the strengths, insights and results of computing science and will extend these by considering issues thrown up by the attempts to build large e-Science applications and infrastructures. In some cases it will look far ahead at the systems and computational models that will underpin technology in 10 to 15 years time.

The workshop will present the thinking behind the call, the results of workshops stimulating thought and collaboration prior to bidding and will provide the computing science and e-Science community with an opportunity to discuss these and to influence future research strategies.

### **The purpose of the BoF is;**

- A) Increased synergy among existing projects
- B) Improve quality of submissions for the new call
- C) Improve the resulting research by establishing a community that keeps each other informed?
- D) Inform future directions of calls in this area
  - \* know what is being done already
  - \* know who would know about what research is going on in an area
  - \* know about recognised challenges
  - \* hear about places where challenges are bubbling up and need formulating

### **The format of the BoF will be;**

- Introduction from EPSRC
- 3 of the current grant holders to talk about what they have achieved, and what they think the issues are (10 mins each)
- A discussion on what will be good research in this area (1hr) with a panel:

### **Example questions for the discussion**

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- 1 What is an effective Modus Operandi linking e-Science practitioners with CS research?
  - 2 What kind of problems are in scope?
  - 3 Can the CS for e-Science projects gain from interchanges of ideas, e.g. at meetings, or by a Special Interest Group at NeSC?
  - 4 What are the open questions that should be addressed?

## **Target Audience**

Computer Science researchers interested in shaping the future of Grid and e-Research activities in the medium and long-term future  
e-Scientists interested in shaping the future of Computer Science challenges to address the real requirements to deliver science effectively in this new paradigm.