Proceedings of UK e-Science All Hands Meeting
Nottingham

2-4 September 2003

Editor
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Welcome to the UK e-Science All Hands Meeting 2003

2-4th September, Nottingham, UK

Dear e-Science collaborators,

We hope that you enjoyed the first e-Science All-Hands meeting at the Sheffield Hallam Conference Centre, and that it led to interesting and productive discussions and collaborations.

The second All Hands Meeting is being held at the East Midlands Conference Centre, Nottingham on 2 – 4 September. The theme of this meeting is Delivering e-Science – at this point in the programme many projects have deliverables to share and a clear understanding of the effort required to deliver the e-Science vision exists.

The goal of the meeting, therefore, is to provide a forum in which information on e-Science projects in all disciplines can be communicated and capabilities being developed within projects can be demonstrated.

Beginning mid morning on Tuesday 2nd September and ending late afternoon on Thursday 4th, the meeting will comprise presentations by groups from throughout the UK who are active in e-Science projects – Research Council pilot projects, e-Science centre industrial projects, IRC projects and others, poster sessions, parallel workshop sessions and Birds of a Feather sessions. The schedule will also include a number of invited UK and international speakers from leading Grid and e-Science activities. There will be a proceedings of the conference.

A buffet dinner will be provided during the poster session on Tuesday evening and a conference dinner is planned for Wednesday evening.

We hope that this schedule mix will provide a stimulating and engaging environment.

See you in Nottingham!

Prof Tony Hey
Director, e-Science Core Programme
AHM Chair: Welcome and Introduction

Dear Colleagues

This is the second All Hands e-Science Meeting to be held in the UK. Last year, a successful meeting was held at Sheffield under the title 'Building Bridges in e-Science'. This year the location is Nottingham and the theme of the Meeting is 'Delivering e-Science'. This is an important conference for the UK's e-Science Initiative as it provides a forum for all e-Science researchers, developers and users, and those who are just curious to see the project results and what progress which has been made in the area.

The Meeting has been structured into an academic programme which comprises oral presentations, poster sessions, mini-workshops and "birds of a feather" sessions. In addition there is a major exhibition which provides a forum to demonstrate e-Science results and achievements. Each of the Regional e-Science Centres and many other projects under the e-Science umbrella, have taken booths in the Exhibition Hall to demonstrate their work. Delegates are invited to spend time at the Exhibition talking to the experts involved in a wide range of projects.

The academic Programme includes three major Keynote Addresses and we would like to express our thanks and appreciation to all of the speakers for generously giving of their time to participate in the Meeting. We have Professor Miron Livny from the University of Wisconsin, Professor Rick Stevens from the Argonne National Laboratory and Professor Jim Hendler from the University of Maryland. They will be covering a range of topics including middleware, high performance computing and the semantic web.

As you may know, we issued a call for paper submissions with a deadline in June. Almost two hundred submissions were received by the Programme Committee. After review, approximately eighty of these were selected for presentation in formal sessions of the meeting. Many of the others will be presented in poster sessions while others are included in the “birds of a feather" sessions and the mini-workshops.

I wish to thank all who participated in the review process and those who have arranged contributions into clusters in order to facilitate good interaction and stimulate discussion across the range of disciplines attending the Meeting. Promoting interdisciplinary interaction among e-Science workers is one of the most important goals of this Meeting. This year the High Performance Computing Users Annual Meeting is being held as part of the All Hands Meeting. On Wednesday the Keynote Address and some of the sessions are devoted to topics in High Performance Computing (HPC). This is in order to facilitate interaction between the HPC and e-Science communities.

I wish to thank the members of the Programme Committee for all of their work towards making this event a success. Carol Becker deserves special mention for her sterling efforts as Conference Organiser and the staff at the National e-Science Centre have helped enormously. Ultimately, however, the success of the conference will be judged by
how well the delegates have participated, learnt, interacted and established contacts with other researchers in different fields. The Programme Committee and the e-Science Directorate have provided the funding, the venue, and the environment to allow these objectives to be achieved. It is now up to all of us to ensure that the Meeting is an outstanding success.

I wish you a successful, stimulating and rewarding meeting and look forward to seeing you again at future All Hands Meetings.

Prof Ron Perrott
Chairman
All Hands Programme Committee

All Hands Conference 2003 Programme Committee

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Welcome to the Proceedings of the UK e-Science All Hands meeting 2003. On this CD you will find pdf versions of the papers which were presented as talks and posters at the conference.

Many thanks from me to the following who assisted in the production of the proceedings:

- The All Hands Meeting 2003 programme committee for refereeing the papers: Professor Ron Perrott, Professor Malcolm Atkinson, Professor Geoffrey Barton, Dr Elena Blanco, Dr John Brooke, Professor Simon Cox, Dr Paul Durham, Dr Neil Geddes, Mr Mark Hayes, Professor Andy Keane, Professor Tom Kirkwood, Dr Bryan Lawrence, Dr Andrew Martin, Professor Tom Rodden, and Professor David Walker.

- Event Co-ordinators at EPSRC: Carol Becker and Dolly Parkinson.

- The team at the National e-Science Centre for their invaluable help: Susan Andrews, Jennifer Chan, Jennifer Hurst, Dr Anna Kenway, Alastair Knowles, Lee McLeod, and Gill Maddy.

- University of Southampton: Lesley Effemey

- Our sponsors for these proceedings: Intel, Microsoft and Hewlett-Packard.

I hope that you have a successful meeting and that these proceedings will be a useful resource.

Prof Simon Cox
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University of Southampton