



Proceedings of the UK e-Science All Hands Meeting 2006

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Editor
Simon J Cox

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Welcome and Introduction

Malcolm Atkinson, e-Science Envoy & Anne Trefethen, Chair of the AHM Steering Committee

This year has seen an important transition for the UK e-Science programme. Many of the first set of pilot projects have completed and we now have clear outputs from the programme. e-Science in the UK had its fifth birthday and moved in to a sustained mode of management with the programme directorate being replaced by an EPSRC programme manager and Malcolm Atkinson as e-Science envoy.

The AHRC began their own e-Science programme and the e-Social science activities have matured, while all of the Research Councils, JISC and other stakeholders continue to develop e-Science and e-Infrastructure.

The theme for this year's UK e-Science All Hands Meeting - *Achievements, Challenges and New Opportunities* - reflected this transition and as you will see in this proceedings reflects the broad range of presentations and discussion held at the meeting. From the results of the completed activities, to the challenges for new areas, from the blue-skies research issues to the industry take up of prototype technologies.

The programme of the meeting included international leaders, workshops, panel sessions, posters and BoFs together with interactive demonstrations at the e-Science Centres' and other booths. In this proceedings we can only capture a slice of the work presented but the papers here indicate the high quality and breadth of the continuing effort in e-Science in the UK.

A special thanks are due to the Steering Committee especially to Ken Brodlie who as Vice Chair will take on the lead for next year's meeting; the Programme Committee, chaired by Paul Watson and Jie Xu, who together with the programme committee members handled the refereeing of the large number of submitted papers; to the team at the National e-Science Centre and EPSRC for organising the event and for the management of the website and the paper submission activity; and to Susan Andrews for her tireless efforts in producing this proceedings.

Finally we would like to acknowledge the support for the meeting from EPSRC, JISC, Microsoft, IBM, ORACLE, Oxford e-Research Centre and the e-Science Institute.

Malcolm Atkinson and Anne Trefethen

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Welcome and Introduction

Paul Watson, Chair of the Programme Committee

The AHM 2006 Programme

Dear Colleagues,

This was the first year in which we have required full papers to be submitted for review rather than just abstracts. This change was made as the quality of the All Hands papers has risen steadily since the very first meeting in 2001 and we wanted to ensure that the very best papers were presented at the meeting. We believe that the change has been a success, enabling us to select an exciting set of high quality papers. For this, we are of course very grateful to those who submitted papers, successful or otherwise.

All submissions to AHM 2006 were rigorously reviewed under the supervision of the PC. We received 128 paper regular submissions from which the PC selected 84 papers to be presented. I would like to thank the members of the PC who were able to maintain a high quality of reviewing even though the timescales were much tighter than in previous years. Throughout the whole process, the members were unfailingly helpful, hard-working and supportive. Those other reviewers who provided expert advice on papers in their area were also of great help to us. Overall, I feel that this reflects the importance and warmth with which the AHM is viewed within the e-Science community.

The most oversubscribed part of the conference this year was the Workshop programme for which we received 25 proposals for only 10 slots. It is good to see the growing worldwide interest in the AHM reflected in the UK-Korean and UK-Chinese workshops that we will be hosting. The Birds of a Feather sessions were also popular, with 13 proposals for only 5 places. In the case of both Workshops and BoFs, the PC tried to strike a balance between encouraging the formation of new communities in interesting, emerging areas, and supporting mature communities that have developed over the past years at the AHM.

The overall reviewing process was made straightforward thanks to the work of Susan Andrews of NeSC who not only provided online tools that simplified our work, but also gave me valuable help through the past 8 months, for which I am very grateful.

Finally, I would like to thank the Vice-Chair - Prof Jie Xu – for his constant assistance and good advice.

I hope you find the AHM 2006 programme interesting and enjoyable.

Paul Watson
Chair
AHM 2006 Programme Committee

AHM 2006 Programme Committee

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Welcome and Introduction

Simon Cox, editor of the All Hands Proceedings 2006

Welcome to the proceedings of the UK e-Science All Hands meeting 2006. On this CD you will find pdf versions of the papers which were presented in the regular sessions, workshops, and as posters at the conference.

Many thanks to:

- The All Hands Meeting 2006 programme committee for refereeing the papers
- The Team at the National e-Science Centre (NeSC) for their invaluable help
- Our sponsors for these proceedings.

Particular and special thanks to the invaluable Susan Andrews at NeSC, who performed an excellent and thorough job in bringing all aspects of the proceedings together- right from handling the initial submissions to delivering the final CD.

I hope that you will find this a useful resource.

Prof Simon Cox
University of Southampton