

# First IEEE International Conference on e-Science and Grid Computing

## Dec. 5 – 8, 2005, Melbourne, Australia

http://www.gridbus.org/escience

## CALL FOR PAPERS

The next generation of scientific research and experiments will be carried out by communities of researchers from organizations that span national boundaries. These activities will involve geographically distributed and heterogeneous resources such as computational systems, scientific instruments, databases, sensors, software components, networks, and people. Such large-scale and enhanced scientific endeavors, popularly termed as e-Science, are carried out via collaborations on a global scale.

Grid computing has emerged as one of the key computing paradigms that enable the creation and management of Internet-based utility computing infrastructure, called Cyberinfrastructure, for realization of e-Science and e-Business at the global level. Several national and international projects around the world have been initiated to carry out research and innovation activities that transform the vision of e-Science and Grid computing into reality.

The e-Science 2005 conference, sponsored by the IEEE Computer Society Technical Committee on Scalable Computing (TCSC) and Society for Industrial and Applied Mathematics, is designed to bring together leading international and interdisciplinary research communities, developers, and users of e-Science applications and enabling IT technologies. The conference serves as a forum to present the results of the latest research and product/tool developments, and highlight related activities from around the world.

The following topics concerning e-Science and Grid Computing are of interest, but not limited to:

- Enabling Technologies: Internet and Web Services
- Collaborative Science Models and Techniques •
- Service-Oriented Grid Architectures
- Problem Solving Environments •
- Application Development Environments •
- Programming Paradigms and Models •
- Resource Management and Scheduling •
- Grid Economy and Business Models •
- Autonomic and Self-Organising Grid Networks
- Virtual Instruments and Data Access Management •
- Sensor Networks and e-Science •
- Security Challenges
- Software and Social Engineering
- e-Science & Grid applications in Physics, Biology, Astronomy, Chemistry, Finance, and Engineering.

## PAPER SUBMISSION

Authors are invited to submit papers of not more than 8 pages of double column text using single spaced 10 point size on 8.5 x 11 inch pages, as per IEEE 8.5 x 11 manuscript guidelines:

Queen's University Belfast

MELBOURNE

http://www.gridbus.org/escience/instructions.html Authors should submit a PDF or PostScript (level 2) file that will print on a PostScript printer. Full paper submission instructions will be placed on the conference website. It is expected that the proceedings will be published by the IEEE CS Press, USA and will be made available online through the IEEE Digital Library.

e-Science 2005 will also feature workshops, tutorials, exhibits, and an industrial track. To organize or participate in these please see the conference web site.

#### CONFERENCE ORGANISATION

#### **Honorary Chair**

Ian Foster, Argonne National Lab and Univ. of Chicago, USA **Honorary Vice-Chair** 

Ah Chung Tsoi, Australian Research Council, Australia

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Raj Buyya, GRIDS Lab, University of Melbourne, Australia Ron Perrott, Belfast e-Science Centre, Queen's University, UK

#### **Program Chair**

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Mark Baker, University of Portsmouth, UK

#### **Industry Track Chair**

Wolfgang Gentzsch, MCNC Grid Computing, USA

### **Poster Chair**

Paul Coddington, University of Adelaide, Australia

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Yoshio Tanaka (Asia-Pacific), AIST, Japan Bruno Schulze (South America), LNCC, Brazil Radha Nandkumar (North America), NCSA/UIUC, USA Bernie Boyle (Europe), e-Science Centre, Queen's Univ., UK Haresh Bhatt (Indian subcontinent), ISRO, India

## **IMPORTANT DATES**

Papers Due:	Aug 15, 2005
Notification of Acceptance:	Sept 15, 2005
Camera Ready Papers Due:	Oct 02, 2005



## **PROGRAM COMMITTEE**

- Arshad Ali, National University of Science and Technology, Pakistan
- Greg Astfalk, Hewlett-Packard (HP), USA
- Mark Baker, University of Portsmouth, UK
- Dheeraj Bhardwaj, Indian Institute of Technology, India
- Marian Bubak, Krakow University of Science and Technology, Poland
- Paul Coddington, University of Adelaide, Australia
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- Laurence Liew, Singapore Computer Systems, Singapore
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• Albert Zomaya, University of Sydney, Australia

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