



Welcome to the January/February 2007 edition of the NeSC Newsletter. In it you will find the Call for Papers for the 2007 All Hands Meeting in Nottingham, an article by Malcolm Atkinson on Smart Science along with our monthly article from Iain Coleman, the e-Science Institute's Call For Themes and news stories from both the e-Science community and related activities. There are many many events listed this month, so get them in your electronic diaries now! Hope this year is a good one.

Alison McCall

e-Science – Smart Science by Malcolm Atkinson, e-Science Envoy

Research processes did not change with the advent of e-Science. They remain: collecting and organising the data that characterise the phenomena of interest; inventing and refining theories to explain those phenomena; and developing and running models and analyses that test and parameterise the relationships between data and theory. New modes of communication make for smarter science.

E-Science is a concerted effort to learn how to conduct these processes better. What do we mean by “better”? For some, it means to do them faster or on a larger scale. For others, it means being able to encompass more complexity, deal with more complete systems or obtain more certainty. It often means enabling researchers to be more productive.

Mathematics and logic have enabled researchers to formulate and communicate their theories more quickly, succinctly and precisely. Today, well-founded descriptive notations from computing science substantially enhance that armoury.

Computational modelling, high-performance computing, high-throughput computing and grids accelerate the construction and execution of computational models as well as extending their scope. The same infrastructure accelerates analyses as well as enabling increases in their capacity and precision. Services that wrap models and analyses can reduce the effort required to start using these models and analyses. Where the usage patterns are well understood, portals may further facilitate access and greatly accelerate uptake. E-Science has made significant strides by making it much easier and cheaper to run models and perform analyses.

Data collection is accelerated and data quality improved by research and engineering that advances instrument design, laboratory automation, automatic metadata generation and by well-supported storage and curation. International collaboration and excellent digital networks bring a wealth of data resources within reach. These data originated from simulations, observations, analyses and researchers' annotations.

Creative researchers are placed centre stage. They decide what data to collect and how to collect it. They select the phenomena and develop the theories and models. Above all they plan and execute the analyses that use the data and models either showing support for the theory or detecting patterns or anomalies that trigger further research. The deepest issues in e-Science are how to facilitate those

analyses. How do we enable the rapid application and implementation of the planning decisions? How do we make the specification of the analysis process precise, succinct and easily communicated?

Ease of communication becomes ever more critical as the complexity of the analyses increases. It permits the researcher to repeat and refine the plan, and to report it in the literature where it can help convince readers of the validity of the methods used. It encourages adoption by other researchers and permits accurate review and test of the methods adopted. This is the ultimate benefit: a few master chefs invent the recipes and many good cooks adopt and vary them for their research. This “computer-assisted recipe replication” should take most of the difficult trial and error out of analysis planning and implementation. Of course, the recipes are important IPR and copying may be controlled.

Through the development of scientific workflow languages, UK e-Science has taken a leading role in providing tools to specify, execute automatically and communicate analysis plans. Workflow languages have enabled researchers to organise searches far more complex than they could manage by hand. They have enabled others to adopt and adapt the analysis strategies, thus accelerating the speed of adoption by other researchers. There is no doubt that high-level, scientific workflow languages are one of the most significant e-Science strategies – they deliver smart science.

Are we content to rest on our laurels? I would hope not. There is still much more to do. We need to understand whether the variety of workflow languages is a temporary artefact; we need to develop their precision and communication value; we need to make them easier to understand and more efficient and reliable to execute. We also need to understand how to develop the research e-Infrastructure so that analyses are easier to describe and execute using workflows. We need to change the research culture so that methods are precisely described in the literature in an established and durable workflow notation, so that research can be accurately judged and revisited. These precise descriptions of research methods will be as important to the advance of research in the future as mathematical notations.

Malcolm Atkinson



Call For Papers: Sixth UK e-Science All Hands Meeting

The Sixth UK e-Science All Hands Meeting (AHM 2007) will be held from 10-13th September 2007 at the East Midlands Conference Centre in Nottingham.

The aim of the meeting is to provide a forum in which e-Science projects from all disciplines can be discussed, and where the results from projects can be demonstrated. The conference will therefore feature presentations by groups throughout the UK who are active in e-Science projects, in addition to poster sessions, mini-workshop sessions, project demonstrations, tutorials, and birds-of-a-feather sessions. The schedule will also include a number of invited Keynote speakers involved in leading Grid and e-Science activities.

There are several options for participation (please note that to reflect the increasing quality of the submissions we are asking for full papers to be submitted for review, rather than abstracts):

- * Regular paper. Each paper can be up to 8 pages in length. Full papers (not abstracts) should be submitted. Papers not accepted as full papers can be reconsidered as poster submissions. The submission deadline is the 16th April 2007.

- * Presentation in a mini-workshop. The mini-workshops are sessions organised by individuals to bring together a number of presenters for a particular theme. Details of the workshops, and individual calls for workshop papers will be posted on the AHM web-site in the first week of February.

- * Poster Presentation. There will be a poster session where colleagues will have the opportunity to explain projects to the conference delegates. Each poster paper can be up to 8 pages in length and must be submitted for review by 16th April 2007.

- * Birds-of-a-Feather/Tutorial. Up to five, two-hour sessions will be organised. Birds-of-a-Feather are sessions that do not have the normal session format; for example discussions, panels, tutorials on key aspects of e-Science, etc. If you wish to organise one of these then please submit a 2 page summary to the PC Chair describing the aims, schedule and intended audience by 16th April 2007.

A full review process will be managed by the AHM Programme Committee.

Details of the format required for the papers, and how to submit is available at <http://www.allhands.org.uk/>

There will be proceedings for the conference, which will be provided in CD format with an ISBN number. As in previous years we are aiming to have the best papers published in special issues of at least one journal. This year the Programme Committee will present a best paper award, and that paper will be presented in a plenary session. There will also be a Best Student Paper award, with 1st, 2nd and 3rd classifications. For a paper to qualify, it must have a student as the lead author, and the PC chair must be informed by e-mail of this once the paper has been submitted. This 1st placed paper will also be presented in a plenary session.

Programme Committee Chair, Professor Jie Xu, University of Leeds (jxu@comp.leeds.ac.uk).



In addition, if your organisation is interested in becoming a sponsor of the AHM event. Details can be found online at http://www.allhands.org.uk/about/sponsorship_opportunities.cfm



Professor Sir John O'Reilly awarded a knighthood for contributions to science.

Professor O'Reilly received the honour for his contributions in academia, the telecommunications industry and in particular his exceptional service as Chief Executive of the Engineering and Physical Sciences Research Council (EPSRC).

Professor John O'Reilly moved from EPSRC to become Vice-Chancellor of Cranfield University on the 22nd of December 2006, succeeding Professor Frank Hartley, who had held the post since 1989.



Others on the 2007 Honour List included: Professor John Douglas Perkins Vice-President and Dean, Faculty of Engineering and Physical Sciences, University of Manchester and Professor John Wood, Chief Executive, Central Laboratories of the Research Council who has been involved in leading the development of the ESFRI road map and chairing JCSR.

For a full list go to: <http://www.honours.gov.uk/lists/2007honours.aspx>

Climate Prediction Experiment results aired on BBC

On Sunday the 21st January at 8pm, BBC 1 broadcasted Climate Change: Britain Under Threat. The programme included results from the BBC and Climate Prediction.Net experiments and an interview with CPDN staff. In addition, results now appear on the BBC Climate Change website.

This programme followed on from the launch in February 2006 of the main climateprediction.net experiment, to simulate 1920-2080, in conjunction with the BBC's climate change season.

Over 250,000 people downloaded the BBC Climate change experiment, using distributed computing. "The combined computing power of the tens of thousands of participants (60 TeraFLOPS) far exceeded that of supercomputers typically available to climate researchers." said Carl Christensen from the University of Oxford.

The climateprediction.net project began in 1999 and is a consortium of research organisations, led by the University of Oxford. The consortium includes the Met Office, the University of California - Berkeley, the London School of Economics, the Open University, the University of Reading and the Rutherford Appleton Laboratory. This experiment was funded by the UK Natural Environment Research Council and received additional support from the Microsoft Corporation.

For more information:

<http://www.climateprediction.net/>

<http://www.bbc.co.uk/sn/climateexperiment/>

<http://www.bbc.co.uk/sn/hottopics/climatechange/>

<http://news.bbc.co.uk/1/hi/sci/tech/6268595.stm?ls>

Apply now for the Edinburgh e-Science MSc/Diploma

Applications are still being accepted for admission to the e-Science MSc/Diploma programme at the University of Edinburgh in 2007/08. Further details of the programme are found at http://www.ph.ed.ac.uk/postgraduate/degrees/msc_escience.html Informal enquiries by email to the Programme Director, Dr Robert Mann (rgm@roe.ac.uk).

CompuSteer Travel Bursaries

CompuSteer is an EPSRC-funded network to encourage the development of a computational steering community and promote collaborative activities amongst its members. Membership is free and they run workshops, have a bulletin board and award travel bursaries.

Travel bursaries run in responsive mode. Applications (2 pages) can be submitted by email at any time, and we aim to notify applicants of the outcome within 5 weeks. Recent successful bursaries have introduced steering to new application areas and brought together APIs from two distinct research groups.

Future topics could range from generating input to standards activities, to running a summer school on steering. For more information on the network's aims, go to www.compusteer.hull.ac.uk or email the coordinator, Helen Wright, h.wright@hull.ac.uk.

This month's article

Continuing a series, reflecting upon issues raised by e-Science Institute or National e-Science Centre events that are relevant to the e-Science Community, this month's article looks at two apparently contrasting events held in Edinburgh in January.

The Neverending Mosaic by Dr Iain Coleman, NeSC Science Writer

St John's Baptistry is the oldest building in Florence, a cool dark refuge from the dazzling sun in the tourist-thronged Piazza del Duomo. Its ceiling is a magnificent mosaic, displaying to the dark-adapted eye a panorama of creation, sacrifice, judgement and damnation. To the unknown technicians who created this mosaic, each tiny tile was a problem to be solved in shape, colour and alignment, with minute obsessing over details of material and adhesive. Only with the perspective of distance and time is the true glory of the finished work made manifest.

Science is much the same. Working up close, it can seem like a succession of esoteric technical challenges, each one an exercise in refining a calculation, honing a technique, or measuring the next decimal place. The profound intellectual achievement is impossible to see until you are able to take a step back and look at the work as a whole.

This truth was vividly illustrated this month at NeSC by two contrasting events. The first, the LHCb Upgrade Workshop on 11-12 January, was concerned with the detailed business of planning the next generation of experiments in particle physics at CERN. The second, Professor Peter Clarke's inaugural lecture on the 18th, was a look back at some of the most important results in fundamental physics over recent decades, and at what they tell us about the structure of the Universe.

Professor Clarke spoke of how his love of physics was inspired by George Gamow's Mr Tompkins books and his own fascination with symmetry. The symmetry of the Universe in space and time is what gives rise to the laws of energy and momentum conservation, and a more abstract symmetry – gauge symmetry – implies that fundamental forces between particles are themselves carried by a special class of particles, the gauge bosons. Clarke was heavily involved in studying one of these force-carrying particles, the Z^0 , which is responsible for the weak nuclear force. The Z^0 is a relatively heavy particle, and it takes a lot of energy to create it in a laboratory. The quest to study such heavy particles led to the creation of the Large Electron-Positron collider, or LEP, a circular metal tube 27 km in diameter buried in the ground near Geneva, in which electrons and their antimatter equivalents could be smashed into one another at speeds close to the speed of light, creating a shower of short-lived particles – the faster the collision, the heavier the particles that could be created.

That's the theory. But if you're going to measure the mass of the Z^0 to one part in 100,000 you need to know the dimensions of the 27km LEP tunnel to within a few millimetres. This means identifying all the factors that can affect the length of the tube and systematically compensating for them all. Clarke and his colleagues worked painstakingly to track down every influence that could affect the experiment, and he shared a few of them with his lecture audience. Rainfall was one: when it rains, Lake Geneva fills up and the increased weight would bend the ground around the LEP, distorting the shape of the tunnel. There was also a regular distortion in time with the phases of the Moon, as its tidal forces bent the LEP ring. But one of the most unlikely tools in Clarke's toolbox turned out to be the TGV timetable: electric current leakage from the trains passing nearby would add substantial noise to the experimental signal.

This careful toil eventually paid off. The successful measurement of the Z^0 mass turned out to be one of the defining measurements of the Standard Model of particle physics, and will stand as a definitive result for a long time to come. Its significance goes far beyond one particle's mass. The experiment showed that there are only three generations of elementary particles, all three of them already known to physicists. This is a fundamentally important statement about the structure of the Universe, and a fitting capstone to the intellectual edifice of the Standard Model.

The next challenge is to go beyond the Standard Model. That's where the LHC comes in. The LHC is the Large Hadron Collider, the replacement for the LEP particle accelerator ring, currently being installed at CERN in Geneva. One of its key missions is to study the behaviour of a particular fundamental particle, the b quark – hence, LHCb – with a view to understanding why any matter exists in the Universe at all. According to the Standard Model of particle physics, matter and antimatter should have been created in equal quantities shortly after the Big Bang before promptly annihilating each other in a burst of radiation, leaving the Universe devoid of matter. The fact that we're here to worry about it is proof that it didn't happen, so there must be some new physics beyond the Standard Model that makes matter and antimatter behave differently at high energies.

Like Professor Clarke, the experimenters and theorists working to understand what that new physics might be are faced with a host of difficult, detailed problems: unlike him, they aren't yet able to look back on them from the perspective of a hugely successful and significant result. The LHCb Upgrade Workshop was faced with a particularly tricky task, though one that is not unique in large-scale projects: designing the next stage of the LHCb experiment before the first stage has even been switched on. That first stage is already running late, and any upgrade is unlikely to happen much before 2015. The message from this workshop was that, if the large cost of an upgrade is to be justified, the community will need to be very clear about the physics questions that an improved LHCb will answer.

The scientists aren't working in the dark. Several speakers at the workshop presented results from other experiments that give good grounds to think that new physics is within reach of the LHC. Complementing this experimental work is a massive effort in theoretical and computational physics to achieve the 1% precision that will be needed to detect the signatures of physics beyond the Standard Model, a level of precision that should be achievable with petaflop computing. If the energy and accuracy of the LHCb experiment are sufficient to expose the physics that is responsible for the existence of mass and matter, then results of profound importance may follow. But there is as yet no guarantee that anything significant will be revealed.

And that is the big difference between the mosaicist and the scientist. A mosaic is finite, with a definite plan and endpoint that will be achieved if sufficient skill and resource is brought to bear. Science has no such guarantee. It has to be driven by the faith that one day, after years of work and struggle amidst the details of measurement and calculation, a spectacle will be revealed that is worthy of the toil.



A simulation of a particle collision at the Large Hadron Collider (courtesy of CERN)

Professor Clarke would like to thank the SciFun travelling exhibits team, who provided both a simulation of the LEP particle accelerator and a muon detector that Clarke used to demonstrate how the effects of Einstein's theory of relativity can be observed on Earth.



Call for Topics for the e-Science Institute Thematic Programme to be run in 2008



The e-Science Institute invites proposals for new themes run in 2008

The e-Science Institute (eSI), hosted by the University of Edinburgh, is the UK's Centre for e-Science meetings. Funded by the e-Science Core Programme, it has been operating since August 2001, during which time it has run 406 meetings attended by some 12,844 delegates and hosted 50 visitors who have stayed for varying periods from one day to a year.

As well as hosting meetings, summer schools and the visitors' programme, the Institute runs a thematic programme, which concentrates on in-depth and sustained investigation of a topic by a series of linked talks, visitors, workshops and conferences over a period of six months to a year. Such themes are led by a theme leader who is a long-term funded visitor to the Institute.

Theme topics, as well as being interesting in their own right, should address issues that are relevant to applications researchers and be able to demonstrate significant buy in from both the applications and computational and computing science communities. It is not intended that they address only the sciences – all areas of academic research present opportunities for the application of e-Science techniques.

Our thematic programme is proving popular and we have just announced the three successful proposals that will run in 2007. To continue our rolling programme we are now calling for submissions for topics for themes to start January 2008 or late 2007. These will be reviewed by the eSI Science Advisory Board which will meet in late May 2007, and should be submitted no later than 9 March 2007 for initial consideration by the Programme Committee. Proposals for theme topics can be made either by the research community in which case eSI will undertake to try to find an appropriate leader, or potential theme leaders may put themselves forward along with the theme they wish to develop. Themes carry a budget of about £60k.

Current or completed themes to date:

- Information Services for Smart Decision Making led by Dr Jennifer Schopf of Argonne National Laboratory
- Exploiting Diverse Sources of Scientific Data led by Prof Jessie Kennedy of Napier University
- Adoption of e-Research Technologies: From prototype to commodity to be led by Dr Alex Voss, Prof Rob Procter and Prof Tom Rodden in collaboration with NCeSS.

Further information on eSI themes is available at: <http://www.nesc.ac.uk/esi/themes/index.htm>

To propose a theme or if you have any questions, please contact Anna Kenway by email anna@nesc.ac.uk or +44 (0)131 650 9818

Realising and Coordinating e-Research Endeavours Workshop

The next Workshop which will be held in association with the eSI Thematic Programme: Adoption of e-Research Technologies is organised by Alexander Voss on the 14 March -16 March 2007 at the e-Science Institute, 15 South College Street, Edinburgh. The workshop will be part of an effort to compile a report on strategies and guidelines for realising e-Research infrastructures.

Please go to the bookings page to apply to attend this meeting. The registration deadline is the 7th of March 2007. Enquiries should be made directly to our Conference Administrator <http://www.esi.ac.uk>

International Summer School on Grid Computing Announced

The next International Summer School in Grid Computing will take place from 8 to 20 July 2007. The school will be held in Sweden, in the Gripsholmsviken Hotell & Konferens (<http://www.redcross.se/gripsholm/>), in the beautiful town of Mariefred situated in Södermanland, about an hour away from Stockholm. Students from all over the world are invited to apply for the well-established School, now in its fifth year.

The School will provide an in-depth introduction to Grid technologies that underpin e-Infrastructure and Cyberinfrastructure. It will present a conceptual framework to enhance each student's ability to work in this rapidly advancing field. Reports from world leaders in deploying and exploiting Grids will complement lectures from research leaders shaping future e-Infrastructure. Hands-on laboratory exercises will give participants experience with widely used Grid middleware. The work will be challenging, but rewarding. Graduates of the School will be familiar with the fundamental components of Grid environments, such as authentication, authorisation, resource discovery, and resource access; be able to use Grid environments for basic and advanced job submission, and distributed data management; be conversant with Grid achievements worldwide; be alert to emerging Grid applications; appreciate the potential of e-Infrastructure and be aware of new research opportunities.

The School offers a rare opportunity to hear about the latest achievements from Europe, North America and Asia, and to experience a variety of Grid systems and will include lectures as well as practical exercises and tutorials. Malcolm Atkinson, Programme Chair of the School said: "The Summer School is always a ferment of enthusiasm. Its goal is to build a lasting network of well-informed graduates who will go on to great achievements."

Registration will open in February and applications are invited from enthusiastic and ambitious researchers who have recently started (or are about to start) working on Grid projects. Students may come from any country. They may be planning to pioneer or enable new forms of e-Infrastructure, to engage in fundamental distributed systems research or to develop new methods in any discipline that depends on the emerging capabilities of e-Infrastructure.

In all previous years the school has been oversubscribed, therefore selection for the 2007 school will be competitive. Decisions are made based on the information supplied on the application form and by an applicant's referee. We expect to accept between 60 and 70 students and will be looking for students with commitment and enthusiasm for Grid research and development. Competence and experience in some aspects of software development, distributed systems, computational systems, data systems and Grid applications, is expected. Most students will establish their credentials from academic qualifications, but some will base this on experience. We also welcome as participants educators who are planning to teach Grid computing. We expect to see participants from computer science, computational science and any application discipline. The school will assume that students have diverse backgrounds and build on that diversity. Finally, the summer school will be conducted in English, so participants are expected to be comfortable using spoken English.

For further information and enquiries please email: issgc07@lists.nesc.ac.uk

Applications will be available from February on the summer school website: <http://www.issgc.org>



International Grid battles malaria

Using an international computing Grid spanning 27 countries, scientists on the WISDOM project analysed an average of 80,000 possible drug compounds against malaria every hour. In total, the challenge processed over 140 million compounds.

The computers are all part of EGEE (Enabling Grids for E-scienceE), which brings together computing Grids from different countries and disciplines. During the challenge, the project used the equivalent of 420 years of computing power from a single PC. Up to 5000 computers were used simultaneously, generating a total of 2000 GB (2,000,000,000,000 bytes) of useful data.

Most of the UK's contribution came from GridPP, a computing Grid funded by the Particle Physics and Astronomy Research Council and built to process data from the world's largest particle physics accelerator, due to be turned on later this year in Geneva. Professor Tony Doyle, the GridPP Project Leader, explains, "Although our Grid was built to analyse particle physics data, when we have spare capacity we're able to share it with other scientists worldwide. In this case, we're happy to have contributed more than two million hours of computer time to help find drugs against malaria."

UK computers were used from the Universities of Birmingham, Brunel, Cambridge, Durham, Edinburgh, Glasgow, Imperial College London, Lancaster, Manchester, Oxford, Queen Mary University of London, Royal Holloway University of London, Sheffield, University College London, CCLRC Rutherford Appleton Laboratory and the JET Facilities at Culham Science Centre.

This challenge was a consequence of the first, very successful, large scale in silico docking, which ran on the EGEE Grid in summer 2005. In that case, WISDOM docked over 41 million compounds in just six weeks, the equivalent of 80 years work for a single PC. A second computing challenge targeting avian flu in April and May 2006 has significantly raised the interest of the biomedical research community. The WISDOM researchers plan a further data challenge on avian flu later in 2007.

In addition to the computing power of the EGEE Grid (of which GridPP is a part), AuverGrid, EELA, EUChinaGRID, EUMedGRID and South East Asia Grid all provided additional resources.

Source: PPARC and EGEE Press Releases

EU-IndiaGrid launched

The first European and Indian Grid-focused project EU-IndiaGrid, Joining European and Indian Grids for e-Science Network Community, which is funded by the European Commission, Research Infrastructure Unit, has been launched in Trieste, Italy.

EU-IndiaGrid bridges an existing gap by linking major Grid Infrastructures between India and Europe. The international project, comprising five European research, & industrial partners from the UK and Italy, and six Indian research and governmental institutions geographically spread across the country is a landmark in scientific collaboration between the EU and India.

For further details and regular updates: visit the website <http://www.euindiagrid.eu/>

Training and Education

News

National Grid Service: Application Developer Training
21 February - 23 February
e-Science Institute, 15 South College Street, Edinburgh

<http://www.nesc.ac.uk/esi/events/720/>

This training course is to support developers of applications that are to be deployed on the NGS. It will explore a selection of services and tools that build on the core services provided by the NGS.

This course will comprise:

1. The National Grid Service portal: permits users to interact with the NGS from a browser.

Talks and practicals led by Dr David Meredith, CCLRC Daresbury Laboratory.

2. GridSAM: web service interface for job Submission And Monitoring and file staging.

Talks and practicals led by Dr Steve McGough and Dr Vesselin Novov from the London e-Science Centre, Imperial College London.

3. The Application Hosting Environment: provides the scientist with a simple, lightweight mechanism for launching and monitoring scientific applications.

Talks and practicals led by Dr Stefan Zasada, Centre for Computational Science, Chemistry Department, University College London

4. Condor and Condor-G: Condor is deployed by many campus grids; Condor-G permits jobs to be submitted via Condor to the NGS.

Talks and practicals led by TOE training team.

5. Data services on the NGS: how data can be shared by use of SRB and OGSA-DAI. Talks by Neil Chue-Hong, EPCC and by the TOE training team.

For details and registration for other training events see <http://www.nesc.ac.uk/training/events/index.html#mostrecent>

The 20th Open Grid Forum - OGF20 and EGEE User Forum

7 - 11 May 2007, Manchester International Convention Centre, Manchester, UK

OGF20 is co-located with the EGEE User Forum, which will run from 9-11 May. Most OGF community events will take place on 7-9 May, with the overlap on the 9th allowing joint meetings between the OGF and EGEE communities.

At OGF20, more than 800 grid enthusiasts from around the globe will gather for one week to further grid standards development and discuss best practices in e-Science. The event also features a two day enterprise programme, led by the Grid Computing Now! KTN, that will focus on real world case studies and practical grid solutions.

Invitations are requested for proposals for presentations and workshops. Please see the details below, which include the time line and URL for submissions.

The OGF20 Programme will offer a series of 30-90 minute talks and panels emphasising the applications and operations of grids in research and commercial contexts. It will also offer half and full-day workshops on the implementation and application of grid software. One track of the programme will focus on explaining and discussing the opportunities for the successful deployment of Grids in Business (see http://www.ogf.org/OGF20/documents/OGF20_industry_programme_Grids_Mean_Business.pdf)

While there are no formal publication requirements, all session organisers and contributors are required to submit summary materials for inclusion on the OGF web pages prior to the event. Slides used in presentations must also be made available; some sessions will require these in advance, others immediately after the presentation.

More information on the EGEE User Forum can be found at <http://cern.ch/egee-intranet/User-Forum/>.

Proposals are now being accepted for the OGF20 Programme. Only proposals submitted online prior to 9th February will be considered. To submit a proposal, visit http://www.ogf.org/gf/session_request/commreq.php?event_id=7.

Details (examples, abstracts and slides) of past successful OGF programmes can be viewed at:

http://www.ogf.org/GGF18/ggf_events_ggf18.php

http://www.ogf.org/GGF17/ggf_events_ggf17.htm

OGF20 PROGRAM KEY DATES & DEADLINES

Proposal Submission Deadline - February 9

Acceptance Notification - February 23 [Advance acceptance notification may be given for workshops that involve individual CFPs]

Presentation slides due (for applicable sessions) - April 13

EGEE User Forum - 9-11 May 2007 <http://www.eu-egee.org/uf2>

The EGEE User Forum provides opportunities for discussions between users and Grid service providers, as well as the chance to interactively demonstrate the status of prototypes and of the applications already in production. Participants will be able to establish contact with EGEE and with its user communities, to explore possible cooperation between academic users and business partners, to contribute to plans for the future usage of the EGEE Grid infrastructure, and to discuss the evolution of gLite, the EGEE Grid middleware.

The EGEE User Forum invites abstracts to be submitted from the scientific and business community, via the event web site <http://www.eu-egee.org/uf2> for presentations, live demonstrations and posters. The call will open on 1st December and close 30th January 2007 (extended to 14th February). The main areas of interest will cover key topics in Grid technology such as experience with and development of data access tools, interactive usage of the Grid, running complex workflows on the infrastructure and Grids as collaborative environments.

Please note: The Programme Committee has agreed an extension to February 14th, but this is an absolutely firm deadline. Please send abstracts as soon as possible, since the Programme Committee has already commenced the processing of the abstracts and the creation of the detailed User Forum programme.



AgentcitiesUK.net Challenge Day 5: Agents and Grids - CALL FOR PARTICIPATION
19th—20th February 2007
National e-Science Centre, Edinburgh, UK

The fifth AgentcitiesUK.net Challenge Day on Agents and Grids: moving towards the intelligent grid will be held on 19th—20th February 2007 at the National e-Science Centre (NESC), Edinburgh, UK.

This is the fifth meeting in a series that has previously investigated issues in e-Health provision (CD1), e-Government/e-Democracy (CD2), intelligent transportation systems (CD3) and disaster response and management (CD4).

The last few years have seen a growing realisation that the essential features of agents - reactive, pro-active and social - are equally essential to the construction and management of a grid that satisfies the vision of ubiquitous computing power combined with ready access to complex, scarce resources.

The purpose of the fifth AgentcitiesUK.net Challenge Day is (i) to provide a forum for projects that are attempting to bring these technologies together as well as (ii) an opportunity for established researchers in either area to find out more about the other, with the objective of (iii) building a consensus for a joint research agenda.

We invite applications for participation from UK-based researchers (including postgraduate students) from the agents community, along with stakeholders from the industrial and public sectors, such as emergency response practitioners and government officials.

To apply for a place and see details of the financial support provided, please visit <http://agentcitiesuk.net/> and fill out the event registration form. Funds are also available to support the participation of UK-based research students.

Important Dates

9th February 2007 — Registration deadline
 12th February 2007 — Notification of places and grants
 19th—20th February 2007 — Challenge Days
 For further information: <http://agentcitiesuk.net>
 For registration queries: cd5-registration@agentcitiesuk.net

Steering committee:

Julian Padget, University of Bath (jap@cs.bath.ac.uk)
 Omer Rana, Cardiff University (o.f.rana@cs.cardiff.ac.uk)

Grid Computing Now! Web Seminar
 - 15 February 2007

IT infrastructure for inter-enterprise collaboration

Success in modern business often requires co-operation between multiple companies and departments. This seminar will demonstrate how IT infrastructure can support collaborative design and monitoring, using distributed data and computer assets belonging to multiple organisations, and how this translates into improved business agility.

Mike Boniface, Project Manager, IT Innovation, will talk about supporting collaborative product design in industry, while Tom Jackson of the University of York will describe the BROADEN project - a Rolls-Royce led DTI-funded project, investigating the use of Grid technologies to support Rolls-Royce engineering applications.

We expect this to be of interest to IT managers, software architects, CIOs, business analysts and consultants.

Registration and further information is available at <http://brighttalk.com/event/gridcomputingnow/a4f23670e1-260-intro>

Practical High Throughput Computing for Bioinformatics

This is a 5-day course on the use of grid technologies and distributed systems in protein bioinformatics analysis. The course aims to give a structured overview of current technologies as well as a practical introduction to their use in protein bioinformatics analysis. The course is based at Imperial College London, where it is being jointly run by the Imperial College Bioinformatics Support Service and the London E-Science Centre, and will cover the use of different GRID and collaboration technologies including Sun Grid Engine, Condor and web services for bioinformatics tasks.

The course is aimed at post-MSc/early PhD level bioinformaticians, with experience of using a scripting language (preferably Perl) in a Unix environment, and with a basic understanding of XML. The course runs from 26th - 30th March 2007, with a registration deadline of 14th February 2007. Thanks to funding from the BBSRC, this course is available free of charge to BBSRC funded post-docs, students and technicians. Further information is available from <http://web.bioinformatics.imperial.ac.uk/PeST>

30th Jubilee MIPRO International Convention on Hypermedia and Grid Systems Conference

MIPRO takes place from May 21 to 25 2007 in Croatia. Detailed program and all relevant information are given at the web site of the conference.
<http://www.mipro.hr/>.

1st Biomed Grid School

14 – 19th May 2007 in Varenna, Italy (near Milan). Bioinfogrid, EMBRACE, EBI and ICEAGE are involved in organising this School.
<http://www.bioinfogrid.eu/course/biomedgrid2007>

GPC 2007

The Second International Conference on Grid and Pervasive Computing takes place in Paris, France, May 2-4, 2007.

Sixteenth International World Wide Web Conference

May 8-12, 2007, Banff, Alberta, Canada
<http://www2007.org>
The 16th International World Wide Web Conference (WWW2007) will be held at the Fairmont Banff Springs Hotel in Banff National Park.

German e-Science Conference 2007

The GES2007 will be held from 2nd-4th of May 2007 in the city of Baden-Baden. Baden-Baden is located in the Black Forest in the southwest of Germany.

HPCS 2007 May 13-16 2007

HPCS 2007 is being co-sponsored by WestGrid this year and is Canada's pre-eminent forum for HPC and HPC technologies.

This conference is attended by Canadian and international HPC experts renowned in computer science; engineering; mathematics; and the natural, health and social sciences. Its focus is on new and exciting scientific and technical work involving HPC technologies.

We encourage members of the UK science and HPC community to join us for this event. If you require any more information, please visit the HPCS 2007 website: <http://www.westgrid.ca/hpcs2007>

2nd Workshop on Workflows in Support of Large-Scale Science (WORKS07)

In conjunction with HPDC 2007, Monterey Bay, CA
June 25 2007

www.isi.edu/works07

Keynote Speaker: Carole Goble, University of Manchester, UK

The Second Workshop on Workflows in Support of Large-Scale Science focuses on the entire workflow lifecycle including the workflow composition, mapping, and robust execution. The workshop also welcomes contributions in the applications area, where the requirements on the workflow management systems can be derived.

Important dates:

Paper submission: February 10, 2007

Acceptance notification: March 17, 2007

Final papers due: April 6, 2007

Papers submitted to this workshop should be in IEEE format (<ftp://pubftp.computer.org/Press/Outgoing/proceedings/>) and no longer than 10 pages. Short papers of up to 6 pages can also be submitted. The papers should be original and not previously published. Papers will be refereed and accepted on the basis of their scientific merit and relevance to the workshop topics.

Papers presented at the workshop will be included in the IEEE HPDC 2007 workshop proceedings.

To submit the papers, please check the website www.isi.edu/works07. The workshop will use the same submission system as HPDC.

HPDC 2007 Workshop on Grid Monitoring

We are pleased to invite those who are developing monitoring services or have gained considerable experience as a site manager or application user with Grid monitoring services to submit papers to the HPDC 2007 Workshop on Grid Monitoring.

The Workshop on Grid Monitoring will be held on the 25th of June 2007 in Monterey Bay California, as a part of the programme of the IEEE International Symposium on High-Performance Distributed Computing (<http://www.isi.edu/hpdc2007/>).

The deadline for submission is the 28th of February 2007. Please submit your papers via the HPDC paper submission site: <https://ssl.linklings.net/conferences/hpdc/>

For more information, please, visit workshop web site:
<http://hpdc-monitoring-ws.web.cern.ch/hpdc-monitoring-ws/>

CALL FOR PAPERS - CoreGRID Symposium August 27th and 28th 2007

IRISA, Rennes, France

<http://europar2007.irisa.fr/CoreGRID-symposium.php>

The CoreGRID Network of Excellence (NoE) is funded by the European Commission's 6th Framework Program. It aims to strengthen and advance scientific and technological excellence in the area of Grid and Peer-to-Peer technologies. The Network is operated as a European Research Laboratory and brings together a critical mass of well-established researchers from 41 institutions.

The CoreGRID Symposium in conjunction with Euro-Par 2007, aims to be the premiere European event on Grid Computing for the dissemination of the results from European and member states initiatives as well as other international projects in Grid research and technologies. It is organised jointly with the Euro-Par 2007 conference. The CoreGRID Symposium will focus on all aspects of Grid computing including service infrastructures and as such will bring together participants from Research and Industry.

All accepted papers will be included in the symposium proceedings, published by Springer in the CoreGRID series. Full submission guidelines are available on the conference web site. Paper submission will be performed electronically via the Euro-Par conference web site <http://europar2007.irisa.fr/submission.php> in PDF format. Papers accepted for publication must also be supplied in source form.

Submission implies the willingness of at least one of the authors to register and present the paper.

Important Dates

- * Contribution submission: March 9, 2007
- * Contribution acceptance: April 20, 2007
- * Final camera ready copy: May 4, 2007
- * Symposium: August 27-28, 2007

The 8th IEEE/ACM International Conference on Grid Computing (Grid 2007)

Austin, Texas, USA, September 19-21, 2007

The Grid conference series is an annual international meeting with the objective to serve as both the premier conference presenting best Grid research and a forum for free exchange of ideas. Grid 2007 will feature invited talks, workshops, tutorials, and refereed paper presentations where new concepts are introduced and explored.

Important Dates

January 26, 2007	Deadline for workshop proposal submission
February 5, 2007	Workshop acceptance notification
February 15, 2007	Deadline for tutorial proposal submission
April 2, 2007	Tutorial acceptance notification
April 7, 2007	Deadline for full paper submission
May 31, 2007	Acceptance notification
June 22, 2007	Camera-ready copy due

<http://www.grid2007.org>

WORKSHOP: UDMS 2007

Venue: Stuttgart, Germany

10th to 12th October 2007

UDMS 2007, the 26th Urban Data Management Symposium, will take place in Stuttgart, Germany from 10th to 12th October 2007.

The event will address the following overall themes:

- Geo-collaboration in Urban and Regional Environments
- Urban and Regional Computing
- GIS in Urban and Regional Data Management for Sustainable Development

<http://www.udms.net/html/Stuttgart2007/firstAnnounc.lasso>>

2007 Digital Preservation Award

Entries are still being accepted for the third Digital Preservation Award worth £5000.. The deadline for applications is 31 March 2007. Further information: http://www.conservationalawards.org.uk/index.php?option=com_frontpage&Itemid=1

Forthcoming Events Timetable

February

1-2	ATLAS Distributed Analysis Tutorial	e-Science Institute	http://www.nesc.ac.uk/esi/events/737/
15	GridComputingNow! Webinar		http://brighttalk.com/event/gridcomputingnow/a4f23670e1-260-intro
16	Study of Users' Priorities for E-Infrastructure for Research (SUPER)	National e-Science Centre	http://www.nesc.ac.uk/esi/events/743/
19-20	Agents and Grids: towards the intelligent grid	National e-Science Centre	http://www.nesc.ac.uk/esi/events/732/
21-23	National Grid Service: Application Developer Training	NeSC / EGEE	http://www.nesc.ac.uk/esi/events/720/
22-23	Models for a sustainable National Grid Service	National e-Science Centre	http://www.nesc.ac.uk/esi/events/731/

March

7-9	European Geoinformatics Workshop	e-Science Institute	http://www.nesc.ac.uk/esi/events/712/
14-16	Realising and Coordinating e-Research Endeavours	e-Science Institute	http://www.nesc.ac.uk/esi/events/745/index.cfm
20	New Kinds of Social Data: from blogs to administrative data	e-Science Institute	http://www.nesc.ac.uk/esi/events/699/
26-28	Lighting the Blue Touchpaper for UK e-Science - Closing Conference of ESLEA Project	The George Hotel, 19-21 George Street, Edinburgh	http://www.nesc.ac.uk/esi/events/748/

April

18-20	HackLatt 2007	e-Science Institute	http://www.nesc.ac.uk/esi/events/755/
24-25	Managing Scientific Workflows with OMII-BPEL	National e-Science Centre	http://www.nesc.ac.uk/esi/esi.htm

May

7 - 11	The 20th Open Grid Forum - OGF20 and EGEE User Forum	Manchester International Convention Centre, Manchester, UK	http://www.ogf.org/gf/session_request/commreq.php?event_id=7 http://www.eu-egee.org/uf2
10-12	Distributed Programming Abstractions, Models and Infrastructure	e-Science Institute	http://www.nesc.ac.uk/esi/esi.html
28-29	Semantic Integration Workshop	e-Science Institute	http://www.nesc.ac.uk/esi/events/756/

September

10 - 13	UK e-Science All Hands Meeting	East Midlands Conference Centre, Nottingham	http://www.allhands.org.uk/
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If you would like to hold an e-Science event at the e-Science Institute, please contact:
Conference Administrator, National e-Science Centre, 15
South College Street, Edinburgh, EH8 9AA
Tel: 0131 650 9833 / Fax: 0131 650 9819 / Email:
events@nesc.ac.uk

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The deadline for the March Newsletter is: 23 February 2007