Monday, December 8, 8 a.m.–5 p.m.
IUPUI Library, Room 1130

Riding the Geoscience Cyberinfrastructure Wave of Data:
Real Time Data Use in Education

Organizers
- Beth Plale, Indiana University, USA
- Kelvin Droegemeier, Oklahoma University, USA
- Sepi Yalda, Millersville University, USA
- Cathy Brown, Indiana University, USA

Program
9–9:15 a.m.
Opening remarks: Beth Plale, School of Informatics, Indiana University

9:15–10 a.m.
Southeastern Universities Research Association (SURA) Coastal Ocean Observing and Prediction (SCOOP)
Sandra Harper, University of Alabama Huntsville

10–10:30 a.m.
Environmental Data on the Web: Really, How Valuable Is it In the Classroom Today?
Moderator: Adam Maltese, School of Education and Geology Department, Indiana University

10:30–10:45 a.m.
Break

10:45–Noon
The Potential of Grid-Enabled Learning for High Impact Weather with LEAD
Sepideh Yalda, Millersville University; Rich Clark

Noon–1 p.m.
Lunch
On your own

1–1:45 p.m.
Online CReSIS and Polar Resources for Education
Ryan Bowman, University of Kansas; Linda Hayden

1:45–2:30 p.m.
MAEviz: Exploring Earthquake Risk Reduction Strategies
Christopher Navarro, NCSA, University of Illinois at Urbana-Champaign; Jim Myers

2:30–3:30 p.m.
How Cyberinfrastructure Can Facilitate STEM Education—Panel of Educators and Technologists
Moderator: Cathy Brown, School of Education, Indiana University; Adam Maltese; Polly Baker

3:30–4 p.m.
Closing Keynote

Monday, December 8, 1–5:00 p.m.
Room 232

Project Management and User Engagement

Organizers
- Dimitrina Spencer, University of Oxford, UK
- Sharon Lloyd, University of Oxford, UK
- Marina Jirotka, University of Oxford, UK
- David Abramson, Monash University, Australia

Program
1–1:15 p.m.
Opening: Why Project Management and User Engagement?
Dimitrina Spencer, OeRC, University of Oxford, UK; Sharon Lloyd, Computing Laboratory, University of Oxford, UK; Marina Jirotka, OeRC, University of Oxford, UK; David Abramson, Monash e-Research Centre (MERC), Monash University, Australia

1:15–1:45 p.m.
Introduction: Beyond Being There: How to Apply Lessons Learned about Virtual Organizations for Successful e-Science Projects
Thomas Finholt, Crew, School of Information, University of Michigan, USA

Session 1: The Challenges of Distributed eResearch Projects

1:45–2 p.m.
Good Partners are Hard to Find: The Search for and Selection of Collaborators in the Health Sciences
Heiko Spallek, School of Dental Medicine, Titus Schleyer, School of Dental Medicine, and Brian Butler, Joseph M Katz Graduate School of Business, University of Pittsburgh, USA

2–2:15 p.m.
The Challenges of Distributed Scientific Collaboration among Top Scientists—A Case Study
Aiorong Luo, Office of Enabling Technologies, University of Michigan Medical School, USA

2:15–2:30
Why good software sometimes dies—and how to save it
Neil Chue Hong, OMII-UK, ECS, University of Southampton; Alex Voss, National Centre for e-Social Science, University of Manchester, UK
Abstract

The participants in this full-day, hands-on workshop will learn about existing models and simulations available across a range of science, technology, engineering, and mathematics disciplines to engage students in interactive learning and scientific discovery. The participants will learn about resources they can directly apply in their classrooms. The participants will explore models that span a range of computing platforms from desktop level problem solving to high-performance computing solutions. The participants will also receive information on how to access high-performance computing resources via TeraGrid for class accounts and research projects.

Tuesday, December 9, 8 a.m.–Noon
Room 232

International Grid Interoperability and Interoperation Workshop 2008 (IGIIW 2008)

Organizers

- Morris Riedel, Jülich Supercomputing Centre, Germany

Program

8–8:10 a.m.
Welcome and short IGIIW 2007 Reflection
Morris Riedel

TALK TOPICS: Interoperability in General

8:10–8:35 a.m.
Invited Talk: To be confirmed

8:35–9 a.m.
Talk 1: Modeling and Evaluating Interoperable Grid Systems
Ivan Rodero; Francesc Guim; Julita Corbalan

9:00–9:25 a.m.
Talk 2: Integration of GridFTP as an Alternative File Transfer in UNICORE for the DEISA Infrastructure
Michael Rambadt; Andrea Vanni; Ralph Niederberger

9:25–9:35
Break

TALK TOPICS: Interoperability of Infrastructures and Middleware

9:35–10 a.m.
Talk 3: Towards Making BOINC and EGEE Interoperable
P. Kacsuk; Z. Farkas; G. Fedak
10–10:25 a.m.  
Talk 4: **Interoperability between ARC and gLite—Understanding the Grid-job Life Cycle**
M. Grønager; D. Johansson; J. Kleist; C. Sætrup; A. Wäänänen; L. Field; D. Qing; K. Happonen; T. Linden

10:25–10:50 a.m.  
Talk 5: **Cross-Domain Middlewares Interoperability for Distributed Aircraft Design Optimization**
Yongjian Wang; D’Ippolito Roberto; Mike Boniface; Depei Qian; Degang Cui; Jiyun Jiang

10:50–11 a.m.  
Break

TALK TOPICS: Interoperability of Information Services and Models

11–11:25 a.m.  
Talk 6: **Functional Analysis and Architecture for Interoperable and DVO-specific Grid Monitoring Services**
Timo Baur

11:25–11:50 a.m.  
Talk 7: **Grid Information System Interoperability: The Need For A Common Information Model**
Laurence Field; Sergio Andreozzi; Balazs Konya

11:50 a.m.–12:00 p.m.  
Workshop Closing
Morris Riedel

---

**Tuesday, December 9, 8 a.m.–12:45 p.m.**

**Room 236**

**PRAGMA Workshop on e-Science Highlights**

**Organizers**
- Kum Won Cho, Korea Institute of Science and Technology Information, South Korea
- Peter Arzberger, University of California, San Diego, USA

**Program**

8–8:15 a.m.  
**Introduction to Session**
Kum-Won Cho and Peter Arzberger

Resources and Data Working Group Activities

8:15–8:40 a.m.  
**Interfacing SCMSWeb with Condor-G—A Joint PRAGMA-Condor Effort**
Somsak Sriprayoonsakul; Putchong Uthayopos (TNGC); Jysoo Lee (KISTI); Cindy Zheng (SDSC); Miron Livney; Jaime Frey (U WI)

8:40–9:05 a.m.  
**Grid Workflows and Data-aware Plugins for Improved Metaschedulers CSF4**
Zhaohui Ding; Xiaohui Wei, Yifan Zhu, Yaoguang Yuan (Jilin); Wilfred Li (NBCR, UCSD); Osamu Tatebe (U Tsukuba)

9:05–9:30 a.m.  
**Grid Interoperability: An Experiment in Bridging Grid Islands**
Blaire Bethwaite; David Abramson; Ashley Buckle (Monash U)

Applications Using PRAGMA Grid Resources

9:30–9:55 a.m.  
**CFD Cyber Education Service Using Cyberinfrastructure**
Jongbae Moon; Chongam Kim (SNU); Yoonhee Kim (Sookmyung); Kum Won Cho (KISTI)

9:55–10:20 a.m.  
**Identification of a Specific Inhibitor for the Dual-Specificity Enzyme SSH-2 via Docking Experiments on the Grid**
Phil Pham; Marshall Levesque (UCSD); Kohei Ichikawa; Susumu Date (Osaka); Jason Haga (UCSD)

10:20–10:45 a.m.  
**Virtual Screening for SHP-2 Specific Inhibitors Using Grid Computing**
Simon X Han; Marshall Levesque (UCSD); Kohei Ichikawa; Susumu Date (Osaka); Jason Haga (UCSD)

---

Biosciences, Telescience, Education

11 a.m.–11:25 p.m.  
Bioscience: **Service Oriented Architecture for Managing Workflows of Avian Flu Grid**
Luca Clementi; Srimath Krishnan; Wesley Goodman; Jingyuan Ren; Wilfred Li (SDSC); Peter Arzberger (UCSD); Guillaume Vareille; Sargis Dallakyan; Michel Sanner (TSRI)

11:25–11:50 a.m.  
Telescience: **Optimized Rendering for a Three-Dimensional Videoconferencing System**
Rachel Chu; Daniel Tenedorio; Jurgen Schulze (UCSD); Susumu Date; Seiki Kuwabara; Atsushi Nakazawa; Haruo Takemura (Osaka); Fang-Pang Lin (NCHC)

11:50 a.m.–12:15 p.m.  
Education: **PRIUS: An Educational Framework on PRAGMA toward Fostering of Globally-leading Researchers in Integrated Sciences**
Susumu Date; Shojo Miyamaga; Kohei Ichikawa (Kansai); Shini Shimoyo (Osaka, NIICT); Haruo Takemura; Toru Fujiwara

12:15–12:45 p.m.  
Discussion
Wednesday, December 10, 10 a.m.–12:30 p.m., Reconvening 1:30–6 p.m., Auditorium

### e-Humanities—An Emerging Discipline

#### Organizers

- Peter Wittenburg (Chair), MPI, Nijmegen, The Netherlands
- Laurent Romary, MPDL, Berlin, Germany
- Sheila Anderson, AHDS, London, UK
- Peter Doorn, DANS, Den Haag, The Netherlands
- Tamas Varadi, Academy of Science, Budapest, Hungary
- Steven Krauwer, University Utrecht, The Netherlands

#### Program

9 a.m.  
Keynote talk

10 a.m.  
**Introduction to the Workshop**  
P. Wittenburg

10:15 a.m.  
**No Claims for Universal Solutions**  
T. Blanke, A. Aschenbrenner, M. Küster, and C. Ludwig

11:15 a.m.  
Coffee Break

11:30 a.m.  
**Managing and Integrating Very Large Multimedia Archives**  
D. Broeder, E. Auer, M. Kemps-Snijders, H. Sloetjes, P. Wittenburg, and C. Zinn

12:30 p.m.  
Lunch Break

1:30 p.m.  
**The e-Linguistics Toolkit**  
S. Farrar and S. Moran

2:30 p.m.  
**Visualization of Dialect Data**  
E. Hinrichs and T. Zastrow

3:30 p.m.  
**Putting Data Categories in their Semantic Context**  
M. Kemps-Snijders, M. Windhouwer, and S. Wright

4:30 p.m.  
**eAQUA—Bringing Modern Text Mining Approaches to Two Thousand Year-old Ancient Texts**  
M. Buechler, G. Heyer, and S. Gründer

5:30 p.m.  
Discussion and Conclusions

6 p.m.  
End Workshop & Start Poster Session

---

Wednesday, December 10, 10 a.m.–Noon, Reconvening 1–5 p.m., Room 232

### SWBES08: Challenging Issues in Workflow Applications

#### Organizers

- Adam Belloum, University of Amsterdam, The Netherlands
- Carole Goble, University of Manchester, UK
- Zhiming Zhao, University of Amsterdam, The Netherlands

#### Program

**Session I**

10–10:30 a.m.  
A Tale of Two Workflows  
Roger Barga

10:30–11 a.m.  
Resource Provisioning Options for Large-Scale Scientific Workflows  
Gideon Juve; Ewa Deelman

11–11:30 a.m.  
Build Grid Enabled Scientific Workflows Using gRAVI and Taverna  
Kyle Chard; Cem Onyuksel; Wei Tan; Dinanath Sulakhe; Ravi Madduri

11:30–Noon  
Kairos: An Architecture for Securing Authorship & Temporal Info. of Provenance Data in Grid-Enabled Workflow Management Systems  
Luiz Gadelha, Marta Mattoso

**Session 2**

1–1:30 p.m.  
Where Experimental Work Flows  
David de Roure

1:30–2 p.m.  
Lattice QCD Workflows: A Case Study  
Luciano Piccoli

2:30–3 p.m.  
StrainInfo.net web services: Enabling Microbiologic Workflows Such as Phylogenetic Tree Building & Biomarker Comparison  
Bert Versylppe; Bram Slabbinck; Wim De Sme; Paul De Vos; Bernard De Baets; Peter Dawyndt

3–3:30 p.m.  
MRGIS: A MapReduce-Enabled High Performance Workflow System for GIS  
Liqiang Wang; Qichang Chen; Zongbo Shang
Thursday, December 11, 10–11:30 a.m.  
Auditorium

Panel Discussion: Assessing the Potential Impact and Challenges of ManyCore Processors on eScience

Moderator

- Dennis Gannon

Panelists

- Jack Dongarra
- Satoshi Matsuoka
- Dan Reed
- Geoffrey Fox

Abstract

This panel will address the challenges that a shift to manycore architectures on eScience. Manycore refers to designs with 32 or more standard core or advanced hybrid architectures and GPUs. The panel will consider both opportunities and challenges.
Innovative and Collaborative Problem Solving Environments (PSE) in Distributed Resources: PSE Workshop08

Organizers

Co-Chairmen
- Soonwook Hwang, Korea Institute of Science and Technology Information (KISTI), Daejon, Korea
- Mo Mu, Dept. of Mathematics, Hong Kong University of Science and Technology, Hong Kong

Committee Members
- Ron Boisvert, Mathematics and Comput Sciences Division, NIST, USA
- Stratis Gallopoulos, University of Patras, Greece
- Ryutaro Himeno, RIKEN, 2-1, Hirosawa, Wako-shi, Saitama, Japan
- Elias Houstis, Department of Computer Eng and Comm, University of Thessaly, Greece
- Yoshimasa Kadooka, Fujitsu Lab, Fujitsu Co. LTD, Japan
- Shigeo Kawata, Graduate School of Engineering, Utsunomiya University, Japan
- David Meredith, Science and Technology Facilities Council, eScience Centre Daresbury Laboratory, UK
- Kimio Miyazawa, Fujitsu Lab, Fujitsu Co. LTD, Japan
- Naren Ramakrishnan, Department of Computer Science, Virginia Tech, USA
- Calvin J. Ribbens, Department of Computer Science, Virginia Tech, USA
- Yukio Umetani, Department of Computer Science, Shizuoka University, Japan
- Nancy Wilkins-Diehr, San Diego Supercomputer Center, University of California at San Diego, United States
- Heon-Young Yeom, Department of Computer Science and Engineering, Seoul National University, Korea
- Wu Zhang, School of Computer Science and Engineering, Shanghai University, China

Program

Thursday, December 11, 10 a.m.–4 p.m.
Room 236

10–10:30 a.m.
The Problem Solving Environments of TeraGrid, Science Gateways, and the Intersection of the Two
Jim Basney, Stuart Martin, JP Navarro, Marlon Pierce, Tom Scavo, Leif Strand, Tom Uram, Nancy Wilkins-Diehr, Wenjun Wu, Coonhan Youn

10:30–11:00 a.m.
A Login Shell for Computing Grid
Xiaoning Wang, Jian Lin, Li Zha

11–11:30 a.m.
A Grid-enabled Problem Solving Environment for Supporting Collaborative Aerodynamic Engineering Process
Junehawk Lee, Dukyun Nam, Soonwook Hwang, Ok-hwan Byeon

11:30 a.m.—1:30 p.m.
Lunch

1:30–2:00 p.m.
Jylab Meets Eclipse: Integrating PSEs with Multi-component Platforms
Giorgos Kollias, Kostantinos Georgiou, Stratis Gallopoulos

2:00–2:30 p.m.
Studies of Agent Composition Model of PSE-Bio Workflow
Jiang Xie, Wu Zhang, Guoyong Mao, Jian Mei

2:30–3:00 p.m.
e-Science Workbench: An Approach to Build Domain-specific Problem Solving Environments
Dongsoo Han, Soonwook Hwang

3–3:30 a.m.
A Distributed Linkage Method for a Large Amount of Event Data
Hiromichi Kobashi, Riichiro Take, Shigeo Kawata

Thursday, December 11, 10 a.m.–5 p.m.
Room 232

Abstractions for Distributed Applications and Systems

Organizers
- Shantenu Jha, Louisiana State University and e-Science Institute, Edinburgh, USA and UK
- Murray Cole, University of Edinburgh, UK
- Dan Katz, Louisiana State University, USA
- Manish Parashar, Rutgers University, USA
- Omer Rana, Cardiff University, UK
- Jon Weissman, University of Minnesota, USA
Friday, December 12, 9:30 a.m. – 11:30 a.m.
Room 236

eScience for Cheminformatics and Drug Discovery

Organizers
- David Wild, Indiana University, USA
- Rajarshi Guha, Indiana University, USA
- Marlon Pierce, Indiana University, USA

Program
9:30-10:00
An Automatic Drug Discovery Workflow Generation Tool using Semantic Web Technologies
Xiao Dong, David Wild

10:00-10:30
SQMD: Architecture for Scalable, Distributed Database System built on Virtual Private Servers
Kangseok Kim, Rajarshi Guha, Marlon Pierce

10:30-11:00
DrugScreener-G: Towards an Integrated Environment for Grid-based Large-scale Virtual Screening & Drug Discovery
Jincheol Kim, Nhan Nguyen Dang, Sehoon Lee, Soonwook Hwang, Vincent Breton

11:00 – 11:30
Open Drug Discovery in Malaria Research
Jean-Claude Bradley, Rajarshi Guha, Philip Rosenthal, Khalid Mirza, Jiri Gut
Friday, December 12, 9:30 a.m.–Noon, Room 232

**eBioinformatics**

**Organizers**

- Mehmet Dalkilic, Indiana University—Bloomington, School of Informatics
- Jake Chen, Indiana University, School of Informatics; Purdue University, Department of Computer & Information Science
- Daisuke Kihara, Purdue University, Computer Science, Biological Sciences

Friday, December 12, 9:30 a.m.–Noon, Reconvening 2–3:30 p.m. Room 232

**Adding Value to Data—Digital Repositories in the e-Science World**

**Organizers**

- Andreas Aschenbrenner, University of Göttingen, Germany
- Tobias Blanke, King's College London, UK
- Mark Hedges, King’s College London, UK

**Program**

9:30–10:30 a.m.  
*Keynote by David de Roure, title TBC*

10:30–10:45 a.m.  
*Virtual Poster Presentation: Synergies between Grid and Repository Technologies—A Methodical Mapping*

Andreas Aschenbrenner, Tobias Blanke, Mark Hedges

10:45–11 a.m.  
*Break*

11 a.m.–Noon  
*Paper: Rethinking Metadata Creation & Management in a Data-Driven Research*

Ross Wilkinson, Andrew Treloar

*Paper: A Wiki for Collaboration & Publication in Research*

Christoph Von Hinten, Andreas Hense, Matthias Razum

2–4 p.m.  
*Expert panel on Adding value to data—Digital Repositories in an e-Science world*

**Confirmed presentation:**

- Adil Hasan: SHAMAN
- Roger Barga: Microsoft Activities
- Reagan Moore: Preservation Management Policies
- Matthias Razum: eSciDoc
- Andrew Treloar: The Australian Programme

4–5 p.m.  
*Informal Networking and Discussion*