

CALL FOR PARTICIPATION

1st International Workshop on Workflow Approaches to New Data-centric Science

Held in conjunction with SIGMOD 2010, 10th June 2010, Indianapolis, IN,
USA

Registration website:

<https://regmaster3.com/2010conf/MOD10/register.php>

A number of innovative, but uncoordinated, efforts in data-centric workflows have made their mark on the scientific and business world in recent years. The goal of this workshop is to use these efforts to bring together a research community around the theoretical foundations, technology development, and domain applications of workflow systems. As a first postulate, we take that there is no uniform workflow solution, in the same way that there is no uniform programming language. Furthermore, our goal is not to promote a particular technology, or even interoperability between individual technologies. What we intend to achieve is to present, discuss and ultimately better the different computational models, usability patterns, and domain approaches used in the field.

The relevant topics include, and are not limited to, the following:

- Role of workflows in data analytics, mining and statistics
- Performance estimation and optimization of workflow execution
- Scalability of workflow-based solutions on very large data sets
- Role of metadata in static profiling of dataflows
- Impact of, and new requirements for, workflow technology on open science
- Workflow warehousing, indexing, searching, and mining
- Workflows for service orchestration
- Mapping workflows to cloud computing environments
- In-database workflow execution
- User interaction models for complex eScience: visibility vs. commoditization
- Workflow repurposing and reuse
- Privacy models for data-centric workflows
- Workflow semantics
- Workflows as invisible middleware
- Workflows in Service-oriented life sciences

This year's program includes six research talks, a project report, and two keynote speeches: by Prof. Bertam Ludaescher from UC Davis and Prof. Tova Milo, from Tel Aviv University. We are looking forward to seeing you there and having an exciting day!

Partly supported by:



PRELIMINARY PROGRAM

8.30am – 10.00am Opening and First Keynote

- Keynote Speaker: Bertram Ludaecher, University of California, Davis

10.00am – 10.30am Coffee break

10.30am – 12.00pm Paper session

- Exploring Repositories of Scientific Workflows, Julia Stoyanovich, Ben Taskar and Susan Davidson
- Privacy Issues in Scientific Workflow Provenance, Susan Davidson, Sanjeev Khanna, Sudeepa Roy and Sarah Cohen Boulakia.
- DFL designer - collection-oriented scientific workflows with Petri nets and nested relational calculus, Jacek Sroka, Piotr Wlodarczyk, Lukasz Krupa and Jan Hidders.

12.00pm – 1.30pm Lunch

1.30pm – 3.00pm Paper session

- A Multi-Dimensional Classification Model for Scientific Workflow Characteristics, Lavanya Ramakrishnan and Beth Plale.
- A General Approach to Data-Intensive Computing using the Meandre Component-Based Framework, Bernie Ács, Xavier Llorà, Loretta Auvil, Boris Capitanu, David Tcheng, Mike Haberman, Limin Dong, Tim Wentling and Michael Welge.
- Meta-Workflows: Pattern-based Interoperability between Galaxy and Taverna, Mohamed Abouelhoda, Shady Alaa and Moustafa Ghanem.

3.00pm – 3.30pm Coffee break

3.30pm – 5.00pm Second Keynote, Discussion

- Report from DCW2009, NSF Workshop on Data-Centric Workflows. Rick Hull, IBM.
- Keynote Speaker: Tova Milo, University of Tel Aviv

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