DataMod 2017 - Call for Papers

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6th International Symposium "From Data to Models and Back"

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(formerly known as MoKMaSD)

Trento, 4-5 September 2017

Satellite event of SEFM 2017

http://pages.di.unipi.it/datamod/edition-2017/

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Abstract submission deadline : 25 May 2017 Submission deadline : 1 June 2017

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#### CONTEXT & OBJECTIVES

DataMod 2017 aims at bringing together practitioners and researchers from academia, industry and research institutions interested in the combined application of computational modelling methods with data-driven techniques from the areas of knowledge management, data mining and machine learning. Modelling methodologies of interest include automata, agents, Petri nets, process algebras and rewriting systems. Application domains include social systems, ecology, biology, medicine, smart cities, governance, education, software engineering, and any other field that deals with complex systems and large amounts of data. Papers can present research results in any of the themes of interest for the symposium as well as application experiences, tools and promising preliminary ideas. Papers dealing with synergistic approaches that integrate modelling and knowledge management/discovery or that exploit knowledge management/discovery to develop/synthesise system models are especially welcome.

Authors are invited to submit original research or tool papers on any relevant topic. These can either be normal or short papers. Short papers can discuss new ideas which are at an early stage of development and which have not yet been thoroughly evaluated.

### TOPICS

Modelling and analysis methodologies include:

- Agent-based Methodologies
- Automata-based Notations
- Big Data Analytics
- Cellular Automata
- Classification
- Clustering, Segmentation and Profiling
- Conformance Analysis
- Constraint Programming
- Data Mining
- Differential Equations
- Empirical Modelling
- Game Theory
- Machine Learning
- Membrane Systems
- Network Theory and Analysis
- Ontologies
- Optimisation Modelling
- Petri Nets
- Process Calculi
- Process Mining
- Rewriting Systems
- Spatio-temporal Data Analysis/Mining
- Statistical Model Checking
- System Dynamics
- Text Mining
- Topological Data Analysis

## Application domains include:

- Biology
- Brain Data and Simulation
- Business Process Management
- Climate Change
- Cybersecurity
- Ecology
- Education
- Environmental Risk Assessment and Management
- Enterprise Architectures
- Epidemiology
- Genetics
- Governance
- Open Source Software Development and Communities
- Pharmacology
- Resilience Engineering
- Safety and Security Risk Assessment
- Social Good
- Social Software Engineering
- Social Systems
- Sustainable Development
- Threat modelling and analysis
- Urban Ecology and Smart Cities

# Synergistic approaches include:

- (1) use of modelling methods and notations in a knowledge management/discovery context
- (2) development and use of common modelling and knowledge management/discovery frameworks to explore and understand complex systems from the application domains of interest

#### SUBMISSION AND PUBLICATION

All contributions in the form of either

- regular (research or position) papers, up to 15 pages, or
- short (research or position) papers, up to 8 pages, will be reviewed by three members of the Program Committee. All papers should be written in English and be in LNCS format. Detailed information on the submission procedure are available at the symposium web page:

http://pages.di.unipi.it/datamod/edition-2017/.

Accepted papers (both regular and short) will be published after the Symposium by Springer in a volume of Lecture Notes in Computer Science (LNCS), which will collect contributions to workshops and symposia co-located with SEFM 2017.

Condition for inclusion in the post-proceedings is that at least one of the co-authors has presented the paper at the Symposium. Pre-proceedings will be available online before the Symposium.

A special issue of a relevant international journal with extended versions of selected papers is planned.

### IMPORTANT DATES

Abstract Submission deadline: 25 May 2017
Paper Submission deadline: 1 June 2017
Accept/Reject Notification: 6 July 2017
Pre-proceedings Final version due: 27 July 2017
Symposium: 4-5 September 2017

#### KEYNOTE SPEAKERS

- \* Siobhán Clarke, Trinity College Dublin
- \* Bruno Lepri, Fondazione Bruno Kessler and MIT Media Lab

# PROGRAM CO-CHAIRS

- \* Vashti Galpin, University of Edinburgh, UK
- \* André Teixeira, Delft University of Technology, Netherlands

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- \* Mark Sterling, Nazarbayev University, Kazakhstan
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- \* Roberto Zunino, University of Trento, Italy

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- \* Anna Monreale, University of Pisa, Italy

## CONTACT

All inquiries should be sent to datamod2017@easychair.org