

INTERNATIONAL CONFERENCE ON MODEL TRANSFORMATION (ICMT) 2009

Theory and Practice of Model Transformations

Co-located with TOOLS EUROPE 2009

June 29-July 3 2009 – ETH Zurich, Switzerland http://www.model-transformation.org/ICMT2009/

CALL FOR PAPERS

Modelling is now essential for dealing with the complexity of IT systems during their development and maintenance processes. Models allow engineers to precisely capture relevant aspects of a system from a given perspective and at an appropriate level of abstraction. As models grow in use for developing IT systems, transformations between models grow in importance. Model transformations allow the definition and implementation of operations on models, and also provide a chain that enables the automated development of a system from its corresponding models. Furthermore, model transformations may also be realized using models, and are, therefore, an integral part of any model-driven approach.

There are already several proposals for model transformation specification, implementation, and execution, which are beginning to be used by Model-Driven Engineering (MDE) practitioners. However, model transformations require specialized support in order to realize their full potential: we also must understand their foundations, their semantics, and their structuring mechanisms and properties (e.g., modularity, composability, and parameterization). We should find effective and efficient ways to treat transformations as first-class assets in MDE, allowing them to be stored, managed, discovered and reused. At the same time, we must be able to chain together and combine model transformations in order to produce new and more powerful transformations, and to be able to implement new operations on models. Finally, model transformations must have methodology support, i.e., they need to be integrated into software development methodologies supported by appropriate tools and environments.

SCOPE

ICMT 2009 will bring together researchers and practitioners to share experiences in using model transformations. ICMT 2009 combines a strong practical focus with theoretical approaches required in any discipline that supports engineering practices. Of particular interest to the organisers of ICMT 2009 are papers that describe *challenges* for model transformation technology, e.g., large-scale experiments in transformation, or problems that are thought to be difficult in model transformation in general, or for specific classes of model transformation tools.

ICMT 2009 will be held at the ETH premises in Zurich, Switzerland, and will host invited talks, technical sessions, and panels. As a working conference, ICMT 2009 will foster the interactions between the participants, stimulating lively debates and discussions around the topics of interest of the conference. A new feature planned for ICMT 2009 is a dedicated session for *tools presentations* and *demonstrations*, de-

signed to inform the community of the state-of-the-art in tooling for model transformation.

ICMT 2009 participants will explore the practical problems of existing languages, tools, and environments for transforming models, and discuss the new challenges ahead. In particular, the conference will address questions about the nature and features of model transformations, their composability and combination to build new model transformations and implement high-level model management operations (e.g., merge, union, difference). The conference will also address the classification of languages for expressing transformations, the measurement of the quality and extra-functional requirements of model transformations (e.g., scalability, robustness, adaptability, reusability), and the definition of development methodologies that allow exploiting all their potential benefits. A special interest of the conference is on the relationships between model transformation theory and tools, and transformations in other domains, e.g., data transformation, program transformation. Papers that relate model transformation to other domains are particularly welcome.

TOPICS

Contributions are solicited on all aspects of model transformation foundations, practices and technologies. In particular, we encourage submissions from both academia and industry about the following (non-exhaustive) list of topics:

- Languages for model transformations
- Scalability and reuse of model transformations
- Domain-specific modelling with model transformations
- Semantics and formal aspects of model transformations
- Implementation of model transformation engines
- Model transformations in MDA and MDE
- Model-driven code generation and other generative techniques using a model transformation approach
- Model query languages
- Higher-level transformations, transformation operators
- Model merging, weaving and composition
- Maintenance and evolution of model transformations
- Model-driven development methodologies, approaches, and languages with a focus on transformations
- Tools and environments for MDE with transformations
- Case studies, novel applications, and industrial experiences reporting on use of model transformations.
- Relationship between model transformation and other domains and technologies, e.g., data transformation, program transformation, and aspect orientation.

SUBMISSION GUIDELINES

Contributions should represent original and previously unpublished ideas that are currently not under review in any conference or journal. The conference organisers solicit two types of papers:

- Research papers (both basic and applied), describing novel ideas with sound conceptual contributions. Papers presenting industrial experiences are also encouraged. Research papers should be no more than 15 pages in LNCS format.
- Tools papers, describing the current state and features of a model transformation toolset. Tools papers will be presented as demonstrations at the conference. Tools papers should be no more than 8 pages in LNCS format, and should describe the standard model transformation features of the tool, as well as those that are distinctive and unique of the tool. Tools papers will be selected based on the originality and distinctiveness of the tool, the clarity of presentation, and the tool's maturity. Selected tools papers will be published in the ICMT proceed-

Each submitted paper will undergo a formal peer review process by at least 3 members of the Program Committee. All submissions should follow the LNCS format and should include the authors' names, affiliations and contact details. Further instructions for submitting a paper will be available at http://www.model-transformation.org/ICMT2009/. We intend to publish proceedings in the Lecture Notes in Computer Science series by Springer. Previous editions of this conference have pursued a journal special issue to showcase the best papers of the conference. We are also considering a special journal issue for ICMT 2009.

IMPORTANT DATES

29 January 2009 Paper submission: Notification of acceptance: 20 March 2009 Camera-ready version due: 6 April 2009 29 June-3 July 2009 Conference dates:

ORGANIZING COMMITTEE

Program Chair

Richard Paige University of York (UK)

Publicity Chair

Dennis Wagelaar Vrije Universiteit Brussels (Belgium)

Further information about the ICMT 2009 conference can be found at: http://www.model-transformation.org/ICMT2009/

INVITED SPEAKER

Benjamin Pierce U. Pennsylvania (USA)

PROGRAM COMMITTEE

Andreas Rummler SAP (Germany)

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