

# WAFOCA 2006

WAFOCA 2006 1st International Workshop on Algebraic Foundations for OCL and Applications Valencia, Spain, March 22nd, 2006 Home page: <http://moment.dsic.upv.es/workshops/WAFOCA06/>

Contact e-mail: [aboronat\\_at\\_dsic.upv.es](mailto:aboronat_at_dsic.upv.es) Workshop Description WAFOCA 2006 is the 1st International Workshop on Algebraic Foundations for OCL and Applications. WAFOCA 2006 is funded by the DYNAMICA project. Its aim is to bring theoreticians, developers and practitioners together to discuss different formal approaches to apply OCL as both constraint and query language in the Model-Driven Engineering field. The call for papers is also available in pdf format. Aims & Scope Model-Driven Development has evolved to the Model-Driven Engineering field, where not only design and code generation tasks are involved, but also traceability, model management, metamodeling issues, model interchange and persistence, etc. To fulfil these tasks, model transformations and model queries are relevant tasks that must be solved. In the MDA context, they are dealt from an open-standard point of view. The standard Query/Views/Transformations (QVT) provides support for both transformations and queries, where OCL seems to be the best choice for defining model queries. OCL is a textual language that is defined as a standard “add-on” to the UML standard. It is used to define constraints and queries on UML models, allowing the definition of more precise and more useful models. It can also be used to provide support for metamodeling. Despite its many advantages, while there is wide acceptance for UML design in CASE tools, OCL lacks a well-suited technological support. In this workshop, we focus on the development of tools that provide formal support for OCL and on its applications as well. Special interest is given to algebraic formalisms or graph grammar-based approaches, and applications. This workshop solicits research contributions and experience reports having an impact on the study of formal approaches for OCL and its applications. Paper submission will be done by invitation, whereas the attendance to the workshop is free. Topics of interest include (but are not restricted to):

- executable specifications;
- algebraic or graph grammar-based approaches for OCL;
- experience reports on development of tools or proposals;
- experience reports on usage of tools or proposals;
- definition of metrics,
- support for precise modelling/metamodelling,
- support model transformations,
- extensions for behaviour specifications,
- support for model testing and simulation, ontology development and validation for the Semantic Web. Invited Speaker

Dr. Reiko Heckel (personal web site).

University of Leicester Foundations of Model Transformations

At the heart of model-driven engineering are activities like maintaining consistency, evolution, translation, and execution of models. These are examples of model transformations. A (mathematical) foundation is needed for studying issues like the expressiveness and complexity, execution and optimisation, well-definedness and semantic correctness of transformations. This lecture is about graph transformations as one such foundation. After introducing the basic concepts of graph transformation by means of an example, different applications of graph transformations to model transformations will be discussed. A survey of relevant theory and tools concludes the presentation.

Important Dates March 3, 2006: Deadline for abstract submission March 10, 2006: Deadline for full paper submission March 22, 2006: Workshop in Valencia Paper Submission and Workshop Proceedings Paper submission will be done by invitation. Submitted papers should be 8-15 pages in length. Papers must be submitted by email as postscript or pdf documents to José Á. Carsí ([pcarsi\\_at\\_dsic.upv.es](mailto:pcarsi_at_dsic.upv.es)). The organizing committee will review the submissions and select papers according to their relevance and interest for the discussions that will take place at the workshop. Authors are encouraged to use the Springer LNCS format ( <http://www.springer.de/comp/lncs/authors.html>) for their papers. The official language of the workshop is English. All accepted papers will be published by the publishing services of the Technical University of Valencia as Technical Report (ISBN is being negotiated). Online proceedings will be available at the WAFOCA'06 web site after the workshop. It is mandatory, that at least one author of each accepted paper attends the workshop and presents the paper there. The pre-proceedings of the workshop are available here. Workshop Programme

10:00

Introduction and Welcome

Isidro Ramos, José Á. Carsí and Artur Boronat

10:30 &ndash; 12:00

Session 1: OCL Applications

10:30 &ndash; 11:00

On the Use of QVT for Modeling Viewpoint Correspondences

José R. Romero, Nathalie Moreno, Francisco Durán, and Antonio Vallecillo

11:00 &ndash; 11:30

Extending OCL for Security Requirements and Traceability

Fernando Molina Molina, Francisco Javier Lucas Martínez, Eduardo Fernández-Medina, Mario Piattini and Ambrosio Toval Álvarez

11:30 &ndash; 12:00

OCL2: Using OCL in the Formal Definition of OCL Expression Measures

Luis Reynoso, Marcela Genero and Mario Piattini

12:00 &ndash; 12:30

BREAK

12:30 &ndash; 13:30

Keynote Speech: Foundations of Model Transformations

Reiko Heckel

13:30 - 15:00

LUNCH

15:00 &ndash; 17:45

Session 2: OCL Tools and Demos

15:00 &ndash; 15:45

Definition of OCL 2.0 Operational Semantics by means of a Parameterized Algebraic Specification

Artur Boronat, Isidro Ramos, José Á. Carsí

15:45 &ndash; 16:30

Using reflection to implement a rewriting-based validation tool for UML+OCL class diagrams in Maude

Manuel Clavel and Marina Egea

16:30 &ndash; 17:00

BREAK

17:00 &ndash; 17:45

Graph Transformation vs. OCL for View Definition

Esther Guerra and Juan de Lara

18:00 &ndash; 19:00

Panel session Location WAFOCA 2006 will be held in Valencia, Spain in March 22nd, 2006. See the detailed information. For information about Valencia, see among others:

- the city web page: <http://www.ayto-valencia.es/>
- tourist information about the city: <http://www.turisvalencia.es/index.aspx>
- information about the Arts and Science City in Valencia: <http://www.cac.es/>
- official web site of the FALLES festival: <http://www.fallas.com/> Organizing Committee

Isidro Ramos, Technical University of Valencia José Á. Carsí, Technical University of Valencia Artur Boronat, Technical University of Valencia

Proceedings See the WAFOCA'06 proceedings.

Contact Information For more information, please contact the organizers [aboronat \\_at\\_ dsic.upv.es](mailto:aboronat_at_dsic.upv.es) or visit the workshop web page <http://moment.dsic.upv.es/workshops/WAFOCA06/>