Welcome from the Chairs

It is our pleasure to welcome you to the first workshop on Verification of Model Transformation (VOLT). This volume compiles the 5 papers presented at the workshop over a total of 7 papers submitted from 7 different countries. The papers underwent a thorough peer-review process with at least 3 reviews per paper.

As model transformation is at the heart of Model-Driven Development (MDD), many experts have identified the verification of model transformation as one of the grand challenges of the domain. VOLT 2012 is the first workshop to offer researchers a dedicated forum to present, discuss, classify, integrate, and advance verification techniques of model transformation relevant to industry.

If we generically consider a model transformation as an algorithm describing a set of computations, then testing it or proving some of its properties can be envisaged through model checking or theorem proving. However, a model transformation performs a particular kind of computation: it operates on models, thus data at a high-level of abstraction rich in semantics. Moreover from a pragmatic point of view, often only the initial input and the final output is of interest, glossing away from intermediate steps. These are primary fundamental differences between the verification of model transformation and typical model-based testing or model checking. A particular point of interest for VOLT is that model transformation is used to perform specific computations in the context of MDD, such as model refinement, refactoring, translation, synthesis, simulation, or synchronization. Thus useful verification techniques for model transformation can be specific to these activities.

This year VOLT is co-localized with the international conference of software testing (ICST) in the wonderful city of Montreal in Quebec, Canada. We hope you will enjoy the technical and social program.

Levi Lúcio, Eugene Syriani, Stephan Weißleder
VOLT workshop organizers.