The MODELS series of conferences is the premier venue for the exchange of innovative technical ideas and experiences focusing on a very important new technical discipline: model-driven software and systems engineering. The expansion of this discipline is a direct consequence of the increasing significance and success of model-based methods in practice. Numerous efforts resulted in the invention of concepts, languages and tools for the definition, analysis, transformation, and verification of domain-specific modeling languages and general-purpose modeling language standards, as well as their use for software and systems engineering.

MODELS 2010, the 13th edition of the conference series, took place in Oslo, Norway, October 3-8, 2010, along with numerous satellite workshops, symposia and tutorials. The conference was fortunate to have three prominent keynote speakers: Ole Lehrmann Madsen (Aarhus University, Denmark), Edward A. Lee (UC Berkeley, USA) and Pamela Zave (AT&T Laboratories, USA).

To provide a broader forum for reporting on scientific progress as well as on experience stemming from practical applications of model-based methods, the 2010 conference accepted submissions in two distinct tracks: Foundations and Applications. The primary objective of the first track is to present new research results dedicated to advancing the state-of-the-art of the discipline, whereas the second aims to provide a realistic and verifiable picture of the current state-of-the-practice of model-based engineering, so that the broader community could be better informed of the capabilities and successes of this relatively young discipline. This volume contains the final version of the papers accepted for presentation at the conference from both tracks.

We received a total of 252 submissions (207 in the Foundations and 45 in the Applications track) from 34 countries; 21% of the papers were co-authored by researchers from different countries, indicating a healthy trend toward international collaboration. The program committees selected a total of 54 papers for presentation at the conference (43 Foundations and 11 Applications) giving a total acceptance rate of 21.3%.

We would like to thank everyone who submitted papers, as well as those who submitted proposals for workshops and tutorials. We would also like to express our gratitude to the large number of volunteers who contributed to the success of the conference. Special thanks are due to Richard van de Stadt for his prompt and unfailing support of CyberChairPRO, the conference management system used for MODELS 2010. Last but not least, we would like to thank our sponsors, ACM, IEEE, SINTEF, and the Department of Informatics at the University of Oslo.

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