multiform

http://www.ict-multiform.eu

Invitation to a Workshop on

Integrated Multi-formalism Tool Support for the Design of Complex Controlled Systems

The goal of this workshop is to present new technologies and tools that aim to overcome many of the challenges that arise in the today's industrial model-based design. New powerful methodologies and tools for model-based analysis and control design are presented whose capabilities go beyond what was possible before, enabling a rigorous solution of design problems even for complex systems. These model-based tools can be seamlessly integrated with the *MULTIFORM Design Framework* (*DF*) for automated design flow support by algorithmic model transformations, thereby extending the use of your design models by removing the need for expensive and error-prone manual recoding of models in many cases. The management of the complete model-based design process is supported by the *DF* through ist facilities for structuring and automated error detection for complex design processes, thus reducing the design cost and time while providing increased safety and correctness of the designed system.

Date & Location

Friday, May 25, 2012

Best Western Parkhotel & Kongresszentrum Westfalenhallen (Strobelallee 45, 44139 Dortmund) in **Dortmund, Germany**.

Workshop Program

09:30 - 09:45: Welcome & Introduction

Sebastian Engell, TU Dortmund, Germany

09:45 - 12:15: Highlights of MULTIFORM - Technical Session

09:45 - 10:15: *SpaceEx* – Hybrid Systems Verification in High Dimensions
Goran Frehse, Universite Joseph Fourier Grenoble, France

10:15 - 10:45: The Final Model is the Running Code - Rigorous Code Analysis with *Arcade*
Stefan Kowalewski, RWTH Aachen, Germany

10:45 - 11:15: Playing Timed Games with *Simulink*
Alexandre David, Aalborg University, Denmark

11:15 - 11:45: Design of MRI subsystems: Integrating Supervisory Control, Simulation, and Validation
Bert van Beek, TU Eindhoven, The Netherlands

11:45 - 12:15: Design, Testing, and Validation of Logic Controllers in Multi-formalism Environments
Stephan Fischer, TU Dortmund, Germany

12:15 - 13:30: Lunch Break

13:30 - 16:00: Information Market & Coffee

Hands-on Session with the *MULTIFORM Design Framework* (*DF*)

Open session to gain experience with the DF principles. If you are interested to try the DF yourself, please bring your own laptop, preferably with Java SDK 1.6 preinstalled, with you for this session. We will install the DF on your laptop.

Hands-on demonstrations of other MULTIFORM techniques and tools

16:00 - 16:30: Round-table Discussion: What's Next In Complex Systems Design?

16:30: Farewell & End of Workshop

technische universität dortmund

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Answer

TU Dortmund University
European Project Office
c/o Department of Biochemical and Chemical Engineering
Emil-Figge-Str. 68
44227 Dortmund
Germany

Registration for the MULTIFORM workshop on 25 May 2012

I will attend the workshop, accompanied by ____ persons.

Name(s):

_____

Dept./Institute:

_____

Organisation:

_____

Address:

_____

Email Adress:

_____

Arrival Details:

_____

(please use printed characters)

Registration by fax to:
+49 (0)231 / 755-3007

Registration by e-mail to:
dyn_events@bci.tu-dortmund.de