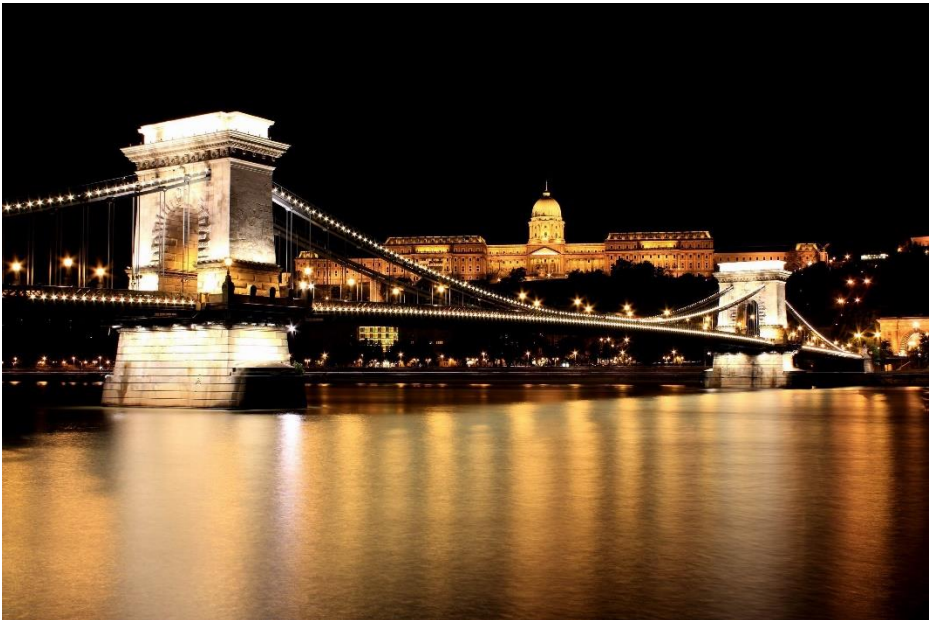


# STAF

SOFTWARE ■ APPLICATIONS  
TECHNOLOGIES ■ FOUNDATIONS  
2013

17th - 20th June  
Budapest, Hungary



Organized by the Fault Tolerant Systems Research Group  
Budapest University of Technology and Economics

# CONFERENCE PROGRAMME OVERVIEW

STAF 2013 Overview	June 17th - Monday			June 18th - Tuesday	
9:00-10:15	BigMDE (room I.B. 145) Welcome + Invited Talk Ed Willink	VOLT 1 (room I.B. 139)	CPSWS 1 (room I.B. 138)	ICMT+TAP (room I.B. 017) Welcome+Invited talk Andrei Voronkov	
10:15-10:45	Coffee break			Coffee break	
10:45-12:15	BigMDE 1 (I.B. 145)	VOLT 2 (I.B. 139)	CPSWS 2 (I.B. 138)	ICMT 1 (I.B. 017 )	TAP 1 (I.B. 019)
12:15-14:00	Lunch	Lunch	Lunch	ICMT 2 (I.B. 017) Lunch	Lunch
14:00-15:30	BigMDE 2 (I.B. 145)	VOLT 3 (I.B. 139) Invited Talk Dániel Varró	CPSWS 3 (I.B. 138)	ICMT 3 (I.B. 017)	TAP 2 (I.B. 019)
15:30-16:00	Coffee break		Coffee break	Coffee break	Coffee break
16:00-18:00	BigMDE 3	VOLT 4	CPSWS 4	ICMT 4	TAP 3
				Welcome Reception 19:00-	

STAF 2013 Overview	June 19th - Wednesday			June 20th - Thursday
9:00-10:15	SC+ICMT+TAP (room I.B. 017) Invited talk Andreas Zeller			TTC 3 (I.B. 019)
10:15-10:45	Coffee break			Coffee break
10:45-12:15	ICMT 5 (I.B. 017)	TAP 4 (I.B. 019)	SC 1 (I.B. 146)	TTC 4 (I.B. 019)
12:15-14:00	Lunch 12:15-13:15 TTC - Live Contest	Lunch	Lunch	Lunch
14:00-15:30	SC+ICMT+TAP (room I.B. 017) Invited Talk, Sven Apel 14:00-15:00			TTC 5 (I.B. 019)
15:30-16:00	TTC 1 15:00-16:00 (I.B. 017)	TAP 5 15:00-16:00 (I.B. 019)	SC 2 15:00-16:00 (I.B. 146)	Coffee break
16:00-18:00	Coffee break	Coffee break	Coffee break	TTC6 (I.B. 019)
	TTC 2 16:30-18:30 (I.B. 017)	TAP 6 16:30-18:00 (I.B. 019)	SC 3 16:30-18:30 (I.B. 146)	
	Banquet 19:00 - 23:00 (approx.)			

## WELCOME TO STAF 2013

Software Technologies: Applications and Foundations (STAF) is a federation of a number of the leading conferences on software technologies. It was formed after the end of the successful TOOLS federated event (<http://tools.ethz.ch>) in 2012, providing a loose umbrella organisation, with steering committee, that aims to provide continuity.

The STAF federated event runs annually; the conferences that participate may vary from year to year, but all focus on practical and foundational advances in software technology. The conferences address all aspects of software technology, from object-oriented design, testing, mathematical approaches to modelling and verification, transformation, model-driven engineering, aspect- oriented techniques, and tools.

Over 4 days, STAF 2013 will offer 3 invited talks by distinguished speakers, 3 main conferences, 4 workshops and 2 tutorials.

## WELCOME TO BUDAPEST

STAF 2013 will be hosted by Budapest, the capital of Hungary, which was founded in 1873 as the unification of the separate historic towns of Buda (the royal capital since the 15th century), Pest (the cultural centre) and Óbuda (built on the ancient Roman settlement of Aquincum). The city is bisected by the River Danube, which makes Budapest a natural geographical centre and a major international transport hub. Budapest has a rich and fascinating history, a vibrant cultural heritage, yet it managed to maintain its magic and charm. It has also been called the City of Spas with a dozen thermal bath complexes served by over a hundred natural thermal springs.

## WHAT TO SEE

Budapest is a city of nearly 2.000.000 inhabitants. It is divided into two parts by the river Danube. There are nine bridges over the river which connects the two sides. The most beautiful ones are the Chain Bridge (Lánchíd), and the Elisabeth Bridge (Erzsébet híd).

One of the best places to walk around is the Castle District. It can be reached by bus (Várbusz) from Széll Kálmán Square, on foot or you can take the funicular uphill. There is a breath-taking view of the city from the Fisherman's Bastion. Across from the Fisherman's Bastion is Matthias Church named after the Hungarian King Matthias. In the Castle District you can find the Royal Palace which is now the home of the Hungarian National Gallery, the Museum of Contemporary Art, the National Széchényi Library and the Budapest History Museum. In the National Gallery you can find paintings of the greatest Hungarian painters such as Mihály Munkácsy, Tivadar Csontváry Kosztka and József Rippl-Rónai.

Downtown is located on the Pest side. It is worth walking along Váci Street all the way from Vörösmarty Square to Fővám Square. On Vörösmarty Square you can find Gerbaud, one of the most famous confectioneries in Hungary. On Váci Street there are many shops and cafes. On Fővám Square you can find the city's largest market hall housed beneath a beautifully restored Zsolnay tiled roof. Of course, there is a lot more to see.

### CONFERENCES AND WORKSHOPS LOCATION

The conference is held on the south campus of the Budapest University of Technology and Economics, in Building "I":

Address: Magyar Tudósok körútja 2.  
1117 Budapest, Hungary



The registration desk is located in the Entrance Hall of the "I" Building, and it will be open every day from 8:15 until the end of the sessions.

### WLAN AND INTERNET ACCESS

The conference venue is covered by wireless local area network. You can connect to the following networks with SSID:

- "Eduroam": with your existing Eduroam account
- "visitor": by using the password "qff4rmeTjpQF76ET" (no quotes!).

## PUBLIC TRANSPORTATION IN BUDAPEST

Budapest has an excellent public transportation system. Recently a ticket costs HUF 350 (EUR 1,20 to 1.50) but different combined and daily tickets offer a good "go as you please" opportunity. Many major lines operate until approx. 23h-24h in the night, and a network of night buses serve the streets afterwards. For finding your way, the site [utvonalterv.hu](http://utvonalterv.hu) provides invaluable help in planning routes in Hungary (especially in Budapest) by public transport, by car, or by other means of transport. Alternatively, we recommend the pages of the Centre for Budapest Transport (BKK, <http://www.bkk.hu/en/timetables/>) to find bus, tram or subway connections within Budapest.

For public transport outside Budapest, the ELVIRA service is helpful in finding domestic train connections, and for the schedule of the national coach services please visit the official timetable of the Volan company. (The latter site speaks only Hungarian, but the search function is almost self-explaining: The first 3 fields are "from", "to", "via", then the date in year/month/day order. Leave everything else as default.)

In Budapest, you have to purchase a ticket before taking a public transportation vehicle, fares cannot be paid on board (excluding taxis, of course). Ticket vending machines or cashiers are usually available at railway stations, coach stations and stops of the subway system. On many lesser tram or bus stops, however, you will need a pre-purchased ticket or resort to newsstands and other miscellaneous ticket vendors. For coach or train services connecting towns, you have the option to buy the ticket on the vehicle, but only if you board it at a lesser stop where no tickets are sold. Be careful that many coaches and cheaper trains have no visual or audible announcements indicating which stop is next, therefore travellers have to watch out for signposts, trust the timetables for accuracy, rely on their familiarity of the surroundings or ask for help from other passengers to decide when to get off. Fortunately express train services like InterCity and EuroCity usually do have a stop indication, but they require a more expensive and pre-purchased reserved seat ticket.

## FROM AND TO THE AIRPORT

For getting to the city from the airport, there are two main options:

1. **Shuttle Bus:** If you are travelling alone, the best choice is the door-to-door Shuttle Bus called "Airport Minibus", also known as "Airport Shuttle". The company has a terminal where you can buy tickets. If you stay in the central part of Budapest, the fee is 3200 HUF for a single ticket and 5500 HUF for return. Transport by the shuttle bus can be somewhat slower than by taxi, as the shuttle bus makes several stops to serve typically 3-5 passengers travelling to / from the same general direction.
2. **Taxi.** "Fő taxi" is the officially licensed company taking passengers from the airport to the city. The company also has desks at the arrival side of both terminals. The price of a ride depends on the destination zone. Most of you will most probably stay in zones 2 or 3, costing 6000 HUF per taxi for leaving the airport, and somewhat less for returning (if you pre-order the voucher at the airport). Please note that this price is only valid for the first stop in the city, after that the taxi operates on a per-distance basis.

The cheapest solution would be to use public transport, but it is not recommended as the airport is not particularly well-connected, and the trip will take quite some time. You can take bus line 200E from the airport to its other terminal Kőbánya-Kispest, and board the Metro line M3 there. M3 will take you to some of the central areas of the eastern bank (Pest). In particular, at Corvin-negyed (formerly Ferenc körút) you can transfer southwestward (in the direction of Móricz Zsigmond körtér or Újbuda-központ) to the trams 4 or 6 to reach the university (see below).

Taxi companies usually accept Euros, just as the shuttle bus company, therefore getting from the airport to the city is possible without having HUF. Public transportation tickets, however, are to be paid in HUF. There are teller (ATM) machines at the airport where you can buy HUF at a better exchanged rate than in banks.

## CONFERENCES

## INTERNATIONAL CONFERENCE ON MODEL TRANSFORMATION (ICMT)

The International Conference on Model Transformation (ICMT) is the premier forum for researchers and practitioners alike from all areas of model transformation.

Model transformation encompasses a variety of technical spaces, including modelware, grammarware, dataware, and ontoware, a variety of model representations, e.g., based on different types of graphs, and a variety of transformation paradigms including rule-based transformations, term rewriting, and manipulations of objects in general-purpose programming languages, to mention just a few.

The study of model transformation includes foundations, structuring mechanisms, and properties, such as modularity, composability, and parameterization of transformations, transformation languages, techniques, and tools. An important goal of the field is the development of high-level model transformation languages, providing transformations that are amenable to higher-order model transformations or tailored to specific transformation problems. To achieve impact on software engineering in general, methodologies and tools are required to integrate model transformation into existing development environments and processes.

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<b>Publication Chair:</b>	Manuel Wimmer (TU Wien)
<b>Publicity Chair:</b>	Philip Langer (TU Wien)
<b>Web Chair:</b>	Ludovico Iovino (Uni l'Aquila)

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Eugene Syriani (US)

Gabriele Taentzer (DE)

James Terwilliger (US)

Massimo Tisi (FR)

Laurence Tratt (UK)

Mark Van Den Brand (NL)

Pieter Van Gorp (NL)

Hans Vangheluwe (BE, CAN)

Eelco Visser (NL)

Janis Voigtländer (DE)

Hironori Washizaki (JP)

Albert Zündorf (DE)

Haiyan Zhao (CN)



## INTERNATIONAL CONFERENCE ON TESTS & PROOFS (TAP)

The TAP conference is devoted to the synergy of proofs and tests, to the application of techniques from both sides and their combination for the advancement of software quality.

Testing and proving seem to be contradictory techniques: once you have proved your program to be correct then additional testing seems pointless; on the other hand, when such a proof is not feasible, then testing the program seems to be the only option. This view has dominated the research community since the dawn of computer science, and has resulted in distinct communities pursuing the seemingly orthogonal research areas.

However, the development of both approaches has led to the discovery of common issues and to the realization of potential synergy. Perhaps, use of model checking in testing was one of the first signs that a counterexample to a proof may be interpreted as a test case. Recent breakthroughs in deductive techniques such as satisfiability modulo theories, abstract interpretation, and interactive theorem proving, have paved the way for new and practically effective methods of powering testing techniques. Moreover, since formal, proof-based verification is costly, testing invariants and background theories can be helpful to detect errors early and to improve cost effectiveness. Summing up, in the past few years an increasing number of research efforts have encountered the need for combining proofs and tests, dropping earlier dogmatic views of incompatibility and taking instead the best of what these software engineering domains has to offer.

The TAP conference aims to bring together researchers and practitioners working in the converging fields of testing and proving, and will offer a generous allocation of papers, panels and informal discussions.

**Program Chairs:**

Margus Veanes  
Luca Viganò

**Program Committee:**

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Achim D. Brucker

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Marco Comini

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Martin Gogolla

Arnaud Gotlieb

Wolfgang Grieskamp

Reiner Hähnle

Bart Jacobs

Thierry Jeron

Jacques Julliand

Gregory Kapfhammer

Nikolai Kosmatov

Victor Kuliامين

Michael Leuschel

Karl Meinke

Alexandre Petrenko

Holger Schlingloff

T.H. Tse

Margus Veanes

Luca Viganò

Burkhard Wolff

Fatiha Zaidi

**INTERNATIONAL CONFERENCE ON SOFTWARE COMPOSITION (SC)**

The International Conference on Software Composition (SC) is the leading venue that addresses challenges of how composition of software parts may be used to build and maintain large software systems. Software Composition 2013 will be the 12th edition in the series, and we invite researchers and practitioners to submit high-quality papers. Submissions that relate theory and practice of software composition are particularly welcome. The SC 2013 program committee seeks original, high quality papers related to Software Composition, such as but not limited to the following:

Component-based software engineering - Composition and adaptation techniques - Composition algebras, calculi and type systems - Feature-oriented software development - Aspect-oriented software development - Model-driven composition - Models of computation - Verification, validation and testing - Dynamic composition and reconfiguration - Large-scale component-based systems - Cloud, service-oriented architectures - Business process orchestration - Visual composition environments - Performance optimization of composite systems

**General Chair:** Welf Löwe (Linnaeus University)  
**Program Chairs:** Walter Binder (University of Lugano)  
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## WORKSHOPS

### TRANSFORMATION TOOL CONTEST (TTC)

Tools are crucial for the promotion of graph and model transformation in industry. Currently, a variety of tool environments exist for different graph and model transformation approaches. However, for potential users, working in application domains where transformation techniques may be useful, it is difficult to select the right tool for their purpose. Moreover, even for most of the tool experts it is true that they know about one or two tools but little

about others. Finally, the tool developers themselves can also be inspired by a more detailed understanding of related approaches.

The aim of this event is to compare the expressiveness, the usability and the performance of graph and model transformation tools along a number of selected case studies. That is, we want to learn about the pros and cons of each tool considering different applications. A deeper understanding of the relative merits of different tool features will help to further improve graph and model transformation tools and to indicate open problems.

The tool contest relates to transformations in one of the following areas:

model synchronisation - interoperability and migration - model execution and simulation - verification of models (or rule sets) - knowledge extraction

Mind that the set of potential application domains is very large. As a non-exhaustive list of examples, consider biology, healthcare, geographic information systems, or logistics,

**Organizing Committee:** Christian Krause (HPI)  
Louis Rose (Univ. of York)  
Pieter Van Gorp (TU/e)

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Arend Rensink (NL)	Albert Zündorf (DE)

**Program Committee:**

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Christian Krause (DE)	Bernhard Schätz (DE)
Ralf Lämmel (DE)	Gabriele Taentzer (DE)
Sonja Maier (DE)	Pieter Van Gorp (NL)
Bart Meyers (BE)	Gergely Várro (DE)
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## BIG MDE

As Model Driven Engineering (MDE) is increasingly applied to larger and more complex systems, the current generation of modelling and model management technologies are being pushed to their limits in terms of capacity and efficiency. As such, additional research and development is imperative in order to enable MDE to remain relevant with industrial practice and to continue delivering its widely-recognised productivity, quality, and maintainability benefits.

The aim of this workshop is to provide a venue where developers and users of modelling and model management languages and tools can present problems and solutions related to topics such as:

Transformation, validation and automated management of large models -  
 Extracting large models through reverse engineering - Collaborative modelling (version control, collaborative editing) - Techniques for efficient management/execution of large model transformations - Model indexing and searching - Model fragmentation - Efficient model persistence and retrieval - Models and model transformations on the cloud.

**Organisers:** Dimitris Kolovos (University of York)  
 Davide Di Ruscio (University of L'Aquila)  
 Nicholas Matragkas (University of York)

### Programme Committee:

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## PROGRAMMING CYBER PHYSICAL SYSTEMS (CPS)

CPS Programming is concerned with resolving combinatorial explosions in the design and testing of such systems, including real-time verification and validation. Core issues include programming models, techniques, methodologies, languages and tools targeting the development of cyber-physical systems. This workshop will be a venue for CPS Programming solution providers, as well as users of such solutions, to describe experiences, identify requirements and research problems, discuss new ideas, present and consolidate results, discover business potential and foster collaboration in the domain of CPS Programming and its applications.

The workshop is related, but not limited to any of the following topics.

Multidisciplinary modeling and analysis of discrete-continuous systems - Model based design methods - Scalable and evolvable system and software architectures - Domain-specific languages for CPS - Workflow systems with or without human actors - Probabilistic formal methods and statistical testing - Risk sensitive decision making - Composition and integration frameworks for heterogeneous systems - Human-computer interaction - Stability of system in the presence of delays - Real time verification and validation - Human and robotic participants in a CPS - Interplay between humans and robots (explaining machine suggestions to humans and deriving workflow upon human command) - Industrial experience on CPS Programming - Application areas of CPS Programming, such as medical CPS

**Programme Chair:** Tamás Kozsik (ELTE)  
**Programme Committee:** Zoltán Horváth (ELTE)  
András Lőrincz (ELTE)  
**Organizing Committee:** Tamás Kozsik (ELTE)  
András Lőrincz (ELTE)  
Melinda Tóth (ELTE)

## VERIFICATION OF MODEL TRANSFORMATION (VOLT)

Model transformations are everywhere in software development, implicitly or explicitly. They became first-class citizens with the advent of MDD. Despite some recent activity in the field, the work on the verification of model transformations remains scattered and a clear perspective on the subject is still not in sight. Furthermore, current model transformation tools lack verification techniques to support such activities.

The Second International Workshop on the Verification Of model Transformation (VOLT 2013) is one of the most accurate venues to offer researchers a dedicated forum to classify, discuss, propose, and advance verification techniques dedicated to model transformations.

VOLT 2013 promotes discussions between theoreticians and practitioners from academy and industry, given its ideal co-location with STAF where also ICMT is hosted. A significant part of the workshop includes a forum for discussing practical applications of transformations and related problems.

**Organizers:** Moussa Amrani, University of Luxembourg, Luxembourg  
 Leen Lambers, Hasso Plattner Institut, Germany  
 Eugene Syriani, University of Alabama, US  
 Manuel Wimmer, Vienna University of Technology, Austria

### Program Committee:

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Jeff Gray (US)	Stephan Weißleder (DE)

# CONFERENCE PROGRAMME

## MONDAY

9:00-10:15

<b>BigMDE</b> (IB. 145)	<b>Welcome</b> <i>Keynote talk: Ed Willink: OCL in the Large</i>
<b>VOLT-1</b> (IB. 139)	<b>A Classification of Software Model Verification Approaches</b> <i>Sebastian Gabmeyer, Petra Brosch and Martina Seidl</i>
	<b>Brainstorming</b>
<b>CPSWS-1</b> (IB. 138)	<b>Opening</b> <i>Zoltán Horváth</i>
	<b>Announcements</b> <i>Melinda Tóth</i>
	<b>New directions in Medical CPS</b> <i>Daniel Sonntag</i>
	<b>Next Generation Embedded Systems: Design, Integration and Validation Challenges</b> <i>András Pataricza</i>
	<b>Factored reinforcement learning framework for workflow management</b> <i>András Lőrincz</i>
10:15-10:45	
	Coffee break
10:45-12:15	
<b>BigMDE-1</b> (IB. 145)	<b>A Research Roadmap Towards Achieving Scalability in Model Driven Engineering</b> <i>Dimitris Kolovos, Louis Rose, Nicholas Matragkas, Richard Paige, Juan De Lara, Esther Guerra, Dániel Varró, István Ráth, Massimo Tisi, Jesús Sánchez Cuadrado and Jordi Cabot</i>
	<b>On the Concurrent Execution of Model Transformations with Linda</b> <i>Loli Burgueño, Javier Troya, Manuel Wimmer and Antonio Vallecillo</i>



	<b>IncQuery-D: Incremental Graph Search in the Cloud</b> <i>Benedek Izsó, Gábor Szárnyas, István Ráth and Dániel Varró</i>
<b>VOLT-2 (IB. 139)</b>	<b>Model Transformations to Verify Model Transformations</b> <i>Levi Lucio and Hans Vangheluwe</i>
	<b>Brainstorming</b>
	<b>Validating Transformations for Semantic Anchoring</b> <i>Tihamer Levendovszky, István Madari and Janos Sztipanovits</i>
	<b>Brainstorming</b>
	<b>On the Realization of TractsTool</b> <i>L. Burgueño, M. Wimmer, J. Troya, A. Vallecillo</i>
	<b>Brainstorming &amp; Summary</b>
<b>CPSWS-2 (IB. 138)</b>	<b><i>Surgical workflow management for the digital operating room</i></b> <i>Stephan Franke</i>
	<b>Current Trends in Surgical Robotics - Opportunities to Cluster Hardware and Software Platforms</b> <i>Tamás Haidegger</i>
	<b>Learning from primate motor behaviour</b> <i>Patrick van der Smagt</i>
	<b>MIROSURGE - A Versatile Robotic Surgery System</b> <i>Stefan Jörg</i>
	<b>Politecnico di Milano skills and vision</b> <i>Giancarlo Ferrigno</i>
	<b>TBA</b> <i>Paolo Fiorini</i>
12:15-14:00	
	Lunch
14:00-15:30	
<b>BigMDE-2 (IB. 145)</b>	<b>Reference Representation Techniques for Large Models</b> <i>Markus Scheidgen</i>

	<p><b>Hawk: Towards a Scalable Model Indexing Architecture</b> <i>Konstantinos Bampis and Dimitris Kolovos</i></p>
	<p><b>Tool Support for Clustering Large Meta-Models</b> <i>Daniel Strüber, Matthias Selter and Gabriele Taentzer</i></p>
VOLT-3 (IB. 139)	<p><b>Keynote talk: Dániel Varró: V&amp;V challenges for model queries and transformations in design tools for avionics</b></p>
	<p><b>Building of working groups &amp; Initiating discussions</b></p>
CPSWS-3 (IB. 138)	<p><b>TOP - Task Oriented Programming</b> <i>Rinus Plasmeijer</i></p>
	<p><b>Model-Integrated Engineering of Cyber-Physical Systems</b> <i>Tihamér Levendovszky</i></p>
	<p><b>Architectural modeling for a systematic approach to the development of self-adaptive embedded computer systems</b> <i>De-Jiu Chen</i></p>
	<p><b>Embedding a CPS specific language into Erlang</b> <i>Melinda Tóth</i></p>
	<p><b>Tasks and combinators -- modules of constrained workflow management</b> <i>Dávid Juhász</i></p>
	<p><b>What and where next</b> <i>András Lőrincz</i></p>
15:30-16:00	
	Coffee Break
16:00-18:00	
BigMDE-3 (IB. 145)	Discussion and wrap-up
VOLT-4 (IB. 139)	Discussions in working groups
	Presentation of results of working groups & Closure
CPSWS-4 (IB. 138)	Breaking into groups on potential projects

## TUESDAY

9:00-10:15	
ICMT+TAP (IB. 017)	Keynote talk: Andrei Voronkov
10:15-10:45	
	Coffee break
10:45-12:15	
TAP-1: Test generation (IB. 019)	<b>Generating Test Suites with Augmented Dynamic Symbolic Execution</b> <i>Konrad Jamrozik, Gordon Fraser, Nikolai Tillmann and Jonathan De Halleux</i>
	<b>Solving Constraints for Generational Search</b> <i>Daniel Pötzl and Andreas Holzer</i>
	<b>Test Program Generation for a Microprocessor: A Case-Study</b> <i>Achim D. Brucker, Abderrahmane Feliachi, Yakoub Nemouchi, Burkhart Wolff</i>
ICMT-1: New programming models (Chair: Tihamér Levendovszky) (IB. 017)	<b>Streaming model transformations: scenarios, challenges and initial solutions</b> <i>Jesús Sánchez Cuadrado and Juan De Lara</i>
	<b>Genetic-Programming Approach to Learn Model Transformation Rules from Examples</b> <i>Martin Faunes, Houari Sahraoui and Mounir Boukadoum</i>
	<b>Walk Your Tree Any Way You Want</b> <i>Anya Helene Bagge and Ralf Lämmel</i>
12:15-12:45	
ICMT-2: Tools and applications (Chair: Keith Duddy) (IB. 017)	<b>On an Automated Translation of Satellite Procedures Using Triple Graph Grammars</b> <i>Frank Hermann, Susann Gottmann, Nico Nachtigall, Benjamin Braatz, Gianluigi Morelli, Alain Pierre and Thomas Engel</i>

	<p><b>The Graph Grammar Library - a generic framework for chemical graph rewrite systems</b> <i>Martin Mann, Heinz Ekker and Christoph Flamm</i></p>
	<p><b>Fragmented Validation - A Simple and Efficient Contribution to XSLT Checking</b> <i>Markus Lepper and Baltasar Trancón y Widemann</i></p>
	<p><b>Model Querying with FunnyQT</b> <i>Tassilo Horn</i></p>
	<p><b>Yet Another Three QVT Languages</b> <i>Ed Willink, Horacio Hoyos and Dimitris Kolovos</i></p>
12:15-14:00	
	Lunch (with tool demos)
14:00-15:30	
<b>TAP-2 Tutorial (IB. 019)</b>	<p><b>Specification and Proof of Programs with Frama-C</b> <i>Nikolai Kosmatov, Virgile Prevosto, Julien Signoles</i></p>
<b>ICMT-3: Evolution, synchronization (Chair: Dimitris Kolovos) (IB. 017)</b>	<p><b>A methodological approach for the coupled evolution of metamodels and ATL transformations</b> <i>Davide Di Ruscio, Ludovico Iovino and Alfonso Pierantonio</i></p>
	<p><b>Metamodel-Specific Coupled Evolution Based on Dynamically Typed Graph Transformations</b> <i>Christian Krause, Johannes Dyck and Holger Giese</i></p>
	<p><b>Robust Real-Time Synchronization between Textual and Graphical Editors</b> <i>Oskar van Rest, Guido Wachsmuth, Jim R.H. Steel, Jörn Guy Süß and Eelco Visser</i></p>
15:30-16:00	
	Coffee Break (with tool demos)

16:00-18:00	
<b>TAP-3: Model-based testing and mutants</b> <b>(IB. 019)</b>	<b>Time for Mutants - Model-based Mutation Testing with Timed Automata</b> <i>Bernhard K. Aichernig, Florian Lorber, Dejan Nickovic</i>
	<b>Incremental Refinement Checking for Test Case Generation</b> <i>Bernhard K. Aichernig, Elisabeth Joebstl, Matthias Kegele</i>
	<b>Divergent Quiescent Transition Systems</b> <i>Gerjan Stokkink, Mark Timmer, Marielle I A Stoelinga</i>
	<b>Evaluation of ASLan mutating operators</b> <i>Johan Oudinet, Alberto Calvi and Matthias Büchler</i>
<b>ICMT-4: Transformation Engineering</b> <b>(Chair: Eugene Syriani)</b> <b>(IB. 017)</b>	<b>Achieving Practical Genericity in Model Weaving through Extensibility</b> <i>Max E. Kramer, Jacques Klein, Jim R. H. Steel, Brice Morin, Jörg Kienzle, Olivier Barais, Jean-Marc Jézéquel</i>
	<b>A Rete Network Construction Algorithm for Incremental Pattern Matching</b> <i>Gergely Varró and Frederik Deckwerth</i>
	<b>Interactive Visual Analytics for Efficient Maintenance of Model Transformations</b> <i>Andreas Rentschler, Qais Noorshams, Lucia Happe and Ralf Reussner</i>
	<b>Checking Model Transformation Refinement</b> <i>Fabian Büttner, Marina Egea, Esther Guerra and Juan de Lara</i>
19:00 -	
	<b>Welcome Reception</b>

## WEDNESDAY

9:00-10:15	
SC+ICMT (IB. 017)	<b>Keynote talk:</b> <i>Andreas Zeller: Mining models from generated system tests</i>
10:15-10:45	
	Coffee break (with tool demos)
10:45-12:15	
SC-1 (Chair: Shigeru Chiba) (IB. 146)	<b>Reusable Components for Lightweight Mechanisation of Programming Languages</b> <i>Haeri, Schupp</i>
	<b>Neverlang 2 – Componentised Language Development for the JVM</b> <i>Cazzola, Vacchi</i>
	<b>Preserving Confidentiality in Component Compositions</b> <i>Fuchs, Guergens</i>
ICMT-5: Testing (Chair: Markus Stumptner) (IB. 017)	<b>Complete Specification Coverage in Automatically Generated Conformance Test Cases for TGG Implementations</b> <i>Stephan Hildebrandt, Leen Lambers and Holger Giese</i>
	<b>Partial Test Oracle in Model Transformation Testing</b> <i>Olivier Finot, Jean-Marie Mottu, Gerson Sunyé and Christian Attiogbe</i>
	<b>Systematic Testing of Graph Transformations - A Practical Approach based on Graph Patterns</b> <i>Martin Wieber and Andy Schürr</i>
TAP-4: Declarative debugging (I.B 019)	<b>Speeding Up Algorithmic Debugging Using Balanced Execution Trees</b> <i>David Insa, Josep Silva and Adrian Riesco</i>
	<b>A Declarative Debugger for Sequential Erlang Programs</b> <i>Rafael Caballero, Enrique Martin-Martin, Adrian Riesco and Salvador Tamarit</i>
12:15-13:15	
	Lunch (with tool demos)

13:15-14:00	
TTC-0 (IB. 017)	Live Tool Contest announcement
14:00-15:00	
SC (IB. 017)	<i>Keynote talk:</i> <i>Sven Apel: Language-Independent and Automated Software Composition: The FeatureHouse Experience</i>
15:00-16:00	
SC-2: (Chair: Walter Cazzola) (IB. 146)	Method Shells: Avoiding conflicts on destructive class extensions by implicit context switches <i>Takehita, Chiba</i>
	Separating Obligations of Subjects and Handlers for More Flexible Event Type Verification <i>Sanchez, Leavens</i>
TTC-1 (IB. 017)	Live Tool Contest
TAP-5: Tutorial (I.B 019)	Pex4Fun: Serious Gaming powered by Symbolic Execution <i>Nikolai Tillmann</i>
16:00-16:30	
	Coffee Break
16:30-18:30	
SC-3: (Chair: Gary Leavens) (IB. 146)	Implementing Feature Interactions with Generic Feature Modules <i>Takeyama, Chiba</i>
	Compositional Development of BPMN <i>Wong</i>
	Building a Customizable Business-Process-as-a-Service Application with current State-of-Practice <i>Gey, Walraven, Van Landuyt, Joosen</i>
	Verifying Data Independent Programs Using Game Semantics <i>Dimovski</i>
TTC-2 (IB. 017)	Live Tool Contest

TAP-6: Tool testing (I.B 019)	A Metric for Testing Program Verification Systems <i>Bernhard Beckert, Markus Wagner and Thorsten Bormer</i>
	Model-Based Testing for Verification Backends <i>Cyrille Artho, Armin Biere and Martina Seidl</i>
	Initiating a Benchmark for UML and OCL Analysis Tools <i>Martin Gogolla, Fabian Büttner and Jordi Cabot</i>
19:00-23:30	
	Banquet

THURSDAY

9:00-10:15	
TTC (IB. 019)	<b>Live Contest Solution Presentations:</b> All participants from the Wednesday contest present their solution. Any TTC attendee can participate in the solution rating.
10:15-10:45	
	Coffee break
10:45-12:15	
TTC: Solution Presentations for the PN2SC case (IB. 019)	Case description and reference solutions
	A NMF solution for the Petri Nets to State Charts case study at the TTC 2013 <i>Georg Hinkel, Thomas Goldschmidt, Lucia Happe</i>
	Solving the Petri-Nets to Statecharts Transformation Case with FunnyQT <i>Tassilo Horn</i>
	Solving the Petri-Nets to Statecharts Transformation Case with UML-RSDS <i>K. Lano, S. Kolahdouz-Rahimi, K. Maroukian</i>



	<p><b>Story Driven Modeling Library (SDMLib): an Inline DSL for modeling and model transformations, the Petrinet - Statechart case</b></p> <p><i>Albert Zündorf, Tobias George, Stefan Lindel and Ulrich Norbistrath</i></p>
	<p><b>PN2SC Case Study: An EMF-IncQuery solution</b></p> <p><i>Benedek Izsó, Ábel Hegedüs, Gábor Bergmann, Ákos Horváth and István Ráth</i></p>
	<p><b>AToMPM Solution for the Petri Net to Statecharts Case</b></p> <p><i>Hüseyin Ergin and Eugene Syriani</i></p>
12:15-13:30	
	Lunch
13:30-15:30	
<b>TTC: Solution Presentations for the Flowgraphs case (IB. 019)</b>	Case description and reference solution
	<p><b>A NMF solution for the Flow Graphs case study at the TTC 2013</b></p> <p><i>Georg Hinkel, Thomas Goldschmidt and Lucia Happe</i></p>
	<p><b>Solving the TTC 2013 Flowgraphs Case with FunnyQT</b></p> <p><i>Tassilo Horn</i></p>
	<p><b>An Epsilon Solution to the Flowgraphs Case</b></p> <p><i>R. Wei, Adolfo Sánchez-Barbudo Herrera, Babajide Ogunyomi, Louis M. Rose, Dimitrios S. Kolovos</i></p>
	<p><b>Flowgraphs: Advanced Triple Graph Grammar Features in eMoflon for increased Expressiveness</b></p> <p><i>Anthony Anjorin and Marius Lauder</i></p>
	<p><b>Constructing Flowgraphs with ATL</b></p> <p><i>Valerio Cosentino, Massimo Tisi, and Fabian Büttner</i></p>
	<p><b>TTC 2013: Flow Graphs. An Eclectic Solution</b></p> <p><i>Jesús Sánchez Cuadrado</i></p>
15:30-16:00	
	Coffee Break

16:00-16:30	
<b>TTC: Solution Presentations for the Restructuring case</b>  (IB. 019)	Case description and reference solutions
	Solving the Class Diagram Restructuring Transformation Case with FunnyQT  <i>Tassilo Horn</i>
	Class Diagram Restructuring with GROOVE  <i>Wietse Smid and Arend Rensink</i>
16:30-18:00	
<b>TTC Wrapup</b>  (IB. 019)	Award Ceremony
	Publication Roadmap
	Conclusions

## STAF 2013 COMMITTEES

<b>General Chair:</b>	Dániel Varró (BME, HU)	
<b>Steering Committee:</b>	Richard Paige (University of York, UK) Antonio Vallecillo (University of Malaga, SP) Jan Vitek (Purdue University, US) Martin Gogolla (University of Bremen, GR) Pieter Van Gorp (Eindhoven Univ. of Techn., NL) Gregor Engels (University of Paderborn, GR) Thomas Gschwind (IBM Zurich Research Lab, CH)	
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<b>Web Chair:</b>	James Williams (University of York, UK)	
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<b>Financial Services:</b>	Gábor Tóth (Öt Évszak Kft.)	

## SOCIAL EVENTS

### WELCOME RECEPTION (TUESDAY, 18<sup>TH</sup> JUNE)

The welcome reception will be held in the banquet hall of the Budapest University of Technology and Economics on June 18th, starting from 19:00.



The hall is situated on the Buda side of the Danube in the main building (Building K) of the university.

As the main building is close to the conference location we invite you for a short walk along the Duna to access the reception site.

### BANQUET (WEDNESDAY, 19<sup>TH</sup> JUNE)

The banquet will be organized in the **Lázár Equestrian Park** owned by the multiple times world champions Lázár brothers. The participants will enjoy a unique horse riding show, and subsequently a traditional Hungarian dinner.



The banquet will start at 19:00, buses will leave right after the end of the sessions (at 18:30) from the conference site to take you to the banquet and also back to your hotel afterwards.

