

## KeY Symposium 2018 – Sessions

### Monday, 13 August

08:30	Registration
09:00	Opening
09:10	Session
10:10	Coffee
10:30	Session
12:00	Lunch
13:15	Session
14:00	Break
14:10	Session
15:10	Coffee
15:40	Session
19:00	Dinner

### Tuesday, 14 August

09:00	Invited Talk
10:00	Coffee
10:30	Session
12:00	Lunch
13:30	Session
15:30	Coffee
16:00	Session

### Wednesday, 15 August

09:00	Session
10:00	Coffee
10:30	Session
11:25	Break
11:35	Session
12:25	Closing
12:30	Lunch
13:30	End

# KeY Symposium 2018 – Program

**Monday, 13 August 2018**

08:30 – 09:00	<b>Registration and Welcome Coffee</b>	
09:00 – 09:10	<b>Opening of the 17th Annual KeY Symposium</b>	
09:10 – 09:40	<b>Probabilistic Valuation of Partial Proofs</b> <i>Mattias Ulbrich</i>	Partial Proofs
09:40 – 10:10	<b>The Power of Partial Proofs</b> <i>Mauricio Chimento</i>	
10:10 – 10:30	<b>Coffee Break</b>	
10:30 – 11:00	<b>Using Immutability in Deductive Verification</b> <i>Richard Bubel</i>	Deductive Verification In KeY
11:00 – 11:30	<b>Utilizing KeY in Software-Factory 4.0</b> <i>Nathan Wasser</i>	
11:30 – 12:00	<b>Block and Loop Contracts in KeY</b> <i>Florian Lanzinger</i>	
12:00 – 13:15	<b>Lunch Break</b>	
13:15 – 13:30	<b>JML Standardization</b> <i>Mattias Ulbrich</i>	The Java Modeling Language
13:30 – 14:00	<b>Discussion: JML</b>	
14:00 – 14:10	<b>Short Break</b>	
14:10 – 14:40	<b>Loop Invariant Generation for KeY</b> <i>Jakob Laenge</i>	Loops And Deduction
14:40 – 15:10	<b>Automatic Reasoning with Loops for Algebraic Data Types</b> <i>Moritz Kiefer</i>	
15:10 – 15:40	<b>Coffee Break</b>	
15:40 – 15:50	<b>The KeY Challenge</b> <i>Mattias Ulbrich</i>	KeY Challenge
15:50 – 17:20	<b>Discussion: KeY Challenge and Solutions</b>	
19:00	<b>Dinner at „Hello Monkey“ (Magasinsgatan 26)</b>	

## Tuesday, 14 August 2018

09:00 – 10:00	<b>Contracts for Software Verification</b> <i>Dilian Gurov</i>	<i>Invited Talk</i>
10:00 – 10:30	<b>Coffee Break and Group Photograph</b>	
10:30 – 11:00	<b>Modular Bounded Model Checking</b> <i>Carsten Sinz</i>	<i>Model Checking And SMT</i>
11:00 – 11:30	<b>Extensions of Generalised Test Tables</b> <i>Alexander Weigl</i>	
11:30 – 12:00	<b>Half the Rent: Horn Solvers for Verification</b> <i>Philipp Ruemmer</i>	
12:00 – 13:30	<b>Lunch Break</b>	
13:30 – 14:00	<b>Smart Contracts – A Killer Application for Verification</b> <i>Wolfgang Ahrendt</i>	<i>New Application Areas For Formal Verification</i>
14:00 – 14:30	<b>Verification of Smart Contracts in Hyperledger Fabric</b> <i>Jonas Schiff</i>	
14:30 – 14:45	<b>Modular Design and Verification of Voting Rules</b> <i>Karsten Diekhoff &amp; Jonas Krämer</i>	
14:45 – 15:30	<b>Discussion: New Application Areas for Formal Verification</b>	
15:30 – 16:00	<b>Coffee Break</b>	
16:00 – 16:30	<b>One Modality Fits All</b> <i>Reiner Hähnle</i>	<i>Beyond Deduction</i>
16:30 – 17:00	<b>Correct Compilation with Automatic Soundness Proofs</b> <i>Dominic Steinhöfel</i>	

## Wednesday, 15 August 2018

09:00 – 09:30	<b>Tool Support for Correctness-by-Construction</b> <i>Tobias Runge</i>	
09:30 – 09:45	<b>Developing Software Everywhere</b> <i>Shmuel Tyszberowicz</i>	Software Engineering
09:45 – 10:00	<b>A Rather Short Talk About Kotlin</b> <i>Alexander Weigl</i>	
10:00 – 10:30	<b>Coffee Break</b>	
10:30 – 10:45	<b>The Proof-Script Debugger</b> <i>Sarah Grebing &amp; Alexander Weigl</i>	Interaction In Deductive Verification
10:45 – 11:00	<b>A Seamless Interaction System for Program Verification</b> <i>Sarah Grebing &amp; Jonas Klamroth</i>	
11:00 – 11:25	<b>New Interaction Features for KeY</b> <i>Wolfram Pfeifer &amp; Jonas Schiffel</i>	
11:25 – 11:35	<b>Short Break</b>	
11:35 – 11:50	<b>KeY-RED</b> <i>Dominic Steinhöfel</i>	Developing The KeY System
11:50 – 12:25	<b>Discussion: KeY Hackathon</b>	
12:25 – 12:30	<b>Closing of the 17th Annual KeY Symposium</b>	
12:30 – 13:30	<b>Lunch</b>	
13:30	<b>End of Symposium</b>	