

ROCKS autumn school  
October 2012 – Programme

**Monday, 22 October: (Augustini hall)**  
**Fundamental topics I & Hybrid Systems I**

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8.30 a.m. - 9.30 a.m.	Opening, Meet & Mingle Anne Remke
9:30 - 10.30	Discrete-time and Continuous-time Markov Chains (I) Christel Baier
10.30 - 11.00	Coffee break
11.00 - 12.00	Discrete-time and Continuous-time Markov Chains (II) Christel Baier
12.00 - 14.00	Lunch (Dining room)
14.00 - 15.00	Verification of Hybrid Automata (I) Thomas Henzinger
15.00 - 15.30	Coffee break
16.30 - 16.00	Verification of Hybrid Automata (II) Thomas Henzinger
17.00	Wine tasting event (Monastery cellar)
18.30	Dinner (Dining room)

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## **Tuesday, 23 October: (Augustini hall)**

### **Fundamental Topics II & Mean field methods I**

8.30 - 9.15	The ROCKS project from the perspective of UniBw Munich Markus Siegle
9.30 - 10.30	Probabilistic Model Checking (I) Marta Kwiatkowska
10.30 - 11.00	Coffee break
11.00 - 12.00	Probabilistic Model Checking (II) Marta Kwiatkowska
12.00 - 14.00	Lunch (Dining room)
14.00 - 15.00	Mean-field Analysis of Discrete-time Markov Chains (I) Jean-Yves Le Boudec
15.00 - 15.30	Coffee break
15.30 - 16.30	Mean-field Analysis of Discrete-time Markov Chains (II) Jean-Yves Le Boudec
16.45 - 17.30	Rigorous Dependability Engineering Marielle Stoelinga
18.30	Dinner (Dining room)

## **Wednesday, 24 October: (Augustini hall)**

### **Mean field methods II & Applications I**

8.30 - 9.30	Mean-field Analysis of Continuous-time Markov Chains (I) Jane Hillston
9.30 - 10.00	Coffee break
10.00 - 11.00	Mean-field Analysis of Continuous-time Markov Chains (II) Jane Hillston
11.15 - 12.00	A Construction and Minimization Service for Continuous Probability Distributions Holger Hermanns
12.00 - 13.30	Lunch (Dining room)
1.30 - 14.30	Towards Trustworthy Aerospace Systems: An Experience Report (I) Joost-Pieter Katoen
14.30 - 15.00	Coffee break
15.00 - 16.00	Towards Trustworthy Aerospace Systems: An Experience Report (II) Joost-Pieter Katoen
16.00 - 19.00	Social Event
19.00	Dinner (Hall with the open fireplace)

## Thursday, 25 October: (Augustini hall)

### Abstractions & Hybrid systems II

8.30 - 9.15	Computing counterexamples for discrete-time probabilistic systems Erika Abraham
9.30 - 10.30	Abstraction in Quantitative Probabilistic Model Checking (I) Gethin Norman
10.30 - 11.00	Coffee break
11.00 - 12.00	Abstraction in Quantitative Probabilistic Model Checking (II) Gethin Norman
12.00 - 14.00	Lunch (Dining room)
14.00 - 15.00	Verification of Stochastic Hybrid Systems (I) John Lygeros
15.00 - 15.30	Coffee break
15.30 - 16.30	Verification of Stochastic Hybrid Systems (II) John Lygeros
16.45 - 17.30	Discounted CTL, a truly quantitative logic David Jansen
18.00	Guided tour through the monastery
19.00	Dinner (Dining room)

## Friday, 26 October: (Augustini hall)

### Applications II

8.30 - 9.15	Hybrid Petri Nets for the dependability evaluation of critical infrastructures Anne Remke
9.30 - 10.30	Applications of Hybrid Systems (I) Martin Fränzle
10.30 - 11.00	Coffee break
11.00 - 12.00	Applications of Hybrid Systems (II) Martin Fränzle
12.00 - 14.00	Lunch (Dining room)
14.00 - 15.00	On the Use of Verification and Quantitative Analysis in Industry (I) Jozef Hooman
15.00 - 15.30	Coffee break
15.30 - 16.30	On the Use of Verification and Quantitative Analysis in Industry (II) Jozef Hooman
16.30 - 17.00	Closing session David Jansen
18.00	Dinner (Dining room)