

Monday (19 Jan. 2015)

7:30 – 8:30	Breakfast
8:30 – 8:45	Welcome by organizers
8:45 – 10:15	2-minute introduction by each participant
10:15 – 10:45	Coffee break
10:45 – 11:45	Introductory talk: Software engineering <i>Presenter: Samuel Kounev</i>
12:15 – 13:30	Lunch
13:30 – 14:30	Introductory talk: Resource management <i>Presenters: Tarek Abdelzaher and Arif Merchant</i>
14:30 – 15:30	Introductory talk: Modeling and analysis <i>Presenter: Marta Kwiatkowska</i>
15:45 – 16:15	Coffee and cake
16:15 – 17:15	Introductory talk: Autonomic computing <i>Presenters: Jeffrey O. Kephart and Hartmut Schmeck</i>
17:15 – 18:00	Discussion and planning of the next days
18:00	Dinner

Tuesday (20 Jan. 2015)

7:30 – 8:45	Breakfast
8:45 – 10:15	Session: Foundations, systematizations, and challenges [Peter Lewis] <i>Types of Computational Self-awareness</i> (25 min.) [Ole Mengshoel] <i>Self-aware Computing: Integrating Evolution, Feedback, and Learning</i> (25 min.) [Tarek Abdelzaher] <i>Foundations and Limitations of Surrogate Sensing for Self-aware Computing</i> (25 min.)
10:15 – 10:35	Coffee break
10:35 – 12:05	Panel Moderator: <i>Xiaoyun Zhu</i> Panelists: <i>Ada Diaconescu</i> <i>Hank Hoffman</i> <i>Joost-Pieter Katoen</i> <i>Paola Inverardi</i>
12:15 – 13:30	Lunch
13:30 – 14:55	Session: Design-time Analysis, Verification and Optimization [Lars Grunske] <i>New Results on Property Specification Patterns</i> (15 min.) [Steffen Becker] <i>Design-Time Analysis of Properties of Self-Adaptive Systems</i> (15 min.) [Aleksandar Milenkoski] <i>Evaluating Security Mechanisms in Dynamic Virtualised Environments</i> (15 min.) [Javier Camara] <i>Analyzing Architecture-based Self-Adaptation via Probabilistic Model Checking</i> (15 min.) [Henry Hoffman] <i>A Case for Coordinating Accuracy-aware Applications with Power-aware Systems</i> (25 min.) [Anne Koziolok] <i>Interplay of Design Time Optimization and Run Time Optimization</i> (15 min.)
15:10 – 15:45	Joint discussion / Book planning
15:45 – 16:15	Coffee and cake
16:15 – 17:30	Session: Self-Adaptation and Management [Alexandru Iosup] <i>Self-* Datacenter Management for Business Critical Workloads</i> (15 min.) [Christian Becker] <i>Adapting the Adaptation Logic</i> (15 min.) [Holger Giese] <i>Software Engineering for Self-Adaptive Systems & Self-Aware Computing</i> (15 min.) [Martina Maggio] <i>Control Theory for Model-based Software Engineering</i> (15 min.)

[Antonio Filieri] *Models in the Middle and Automated Control Synthesis: How to Improve a Software... Engineer* (15 min.)

17:30 – 18:00 Joint discussion / Book planning

18:00 Dinner

Wednesday (21 Jan. 2015)

7:30 – 8:45 Breakfast

8:45 – 10:15 **Session: Runtime Models**

[Samuel Kounev] *The Descartes Modeling Language for Self-Aware Performance and Resource Management* (25 min.)

[Ada Diaconescu] *An Extensible Model-driven Architecture for Controlled Self-organisation* (25 min.)

[Nelly Bencomo] *The Role of Models@run.time for Self-Aware Computing Systems* (15 min.)

[Kirstie L. Bellman] *How to Help Self-aware Systems to Build Their Own Models* (25 min.)

10:15 – 10:45 Coffee Break

10:45 – 12:00 Joint discussion / Book planning

12:15 – 13:30 Lunch

13:30 – 18:00 Social event

18:00 Dinner

Thursday (22 Jan. 2015)

7:30 – 8:45 Breakfast

8:45 – 10:15 **Session: Applications and Case Studies I**

[Kurt Geihs] *Runtime Models for Dynamic Teams* (15 min.)

[Joost-Pieter Katoen] *Zero-Defect Software in Space: A True Mission!* (25 min.)

[Katinka Walter] *Analysis of Mobile Offloading Strategies* (25 min.)

[Arif Merchant] *Optimizing Flash Allocation to Workloads in Google's Colossus File System* (25 min.)

10:15 – 10:45 Coffee break

10:45 – 12:00 Joint discussion / Book planning

12:15 – 13:30 Lunch

13:30 – 15:05 **Session: Applications and Case Studies II**

[Giuliano Casale] *Model-Driven Load Balancing: Algorithms and Estimation Challenges* (15 min.)

[Evangelia Kalyvianaki] *Fairness in Data Stream Processing Under Overload* (25 min.)

[Heiko Koziolok] *Self-aware Computing in Industry 4.0* (15 min.)

[K. R. Jayaram] *Towards Trustworthy Geo-Fenced Cloud Platforms* (25 min.)

[Paola Inverardi] *Distributed Enforcement of Adaptive Service Choreographies* (15 min.)

15:05 – 15:45 Joint discussion / Book planning

15:45 – 16:15 Coffee and cake

16:15 – 18:00 Break-out groups / Book chapter discussions

18:00 Dinner

Friday (23 Jan. 2015)

7:30 – 8:45 Breakfast

8:45 – 10:15 Break-out groups / Book chapter discussions

10:15 – 10:45 Coffee break

10:45 – 12:00 Break-out groups / Book chapter discussions

12:15 – 13:30 Lunch

Departure
