

The Hebrew University of Jerusalem
The Israeli Institute for Advanced Studies

The 2nd Winter School in Engineering and Computer Science: Formal Verification

December 17–December 21, 2017

All lectures will take place at the Israel Institute for Advanced Studies, on the
Edmond J. Safra, Givat Ram Campus

Organizers:

Prof. Orna Kupferman (The Hebrew University)

Prof. Moshe Vardi (Rice University)

Scientific Program

Sunday, December 17, 2017

- 8:15–8:45 Registration
- 8:45–9:00 Opening remark & Greetings by Prof. Michal Linial
- 9:00–10:00 Orna Grumberg, *Algorithmic model checking I*
- 10:00–10:30 Coffee break
- 10:30–11:30 Javier Esparza, *Linear-time verification I*
- 11:30–12:30 Christel Baier, *Probabilistic verification I*
- 12:30–14:00 **Lunch, Belgium House**
- 14:00–16:00 Classical papers panel with tutorial speakers
- 16:00–16:30 Coffee break
- 16:30–17:30 Student Spotlights
- 17:30–19:00 **Student poster session and opening reception, IIAS lobby**
- 19:00–20:30 Historical lecture: Moshe Vardi, *“From Aristotle to the iPhone”*

Monday, December 18, 2017

- 9:00–10:30 Bernd Finkbeiner, *Temporal synthesis I*
- 10:00–10:30 Coffee break
- 10:30–11:30 Orna Grumberg: *Algorithmic model checking II*
- 11:30–12:30 Javier Esparza, *Linear-time verification II*
- 12:30–14:00 **Lunch, Givat Ram cafeterias**
- 14:00–15:30 Rabin Lecture: Tom Henzinger
“A Powerful Paradigm for Modeling and Analysis from Engineering to Biology”
(Brindell & Milton Gotlieb Auditorium – School of Computer Science & Engineering)
- 15:30–16:00 Coffee break
- 16:00–17:00 Student Spotlights
- 17:30–18:30 Student poster session
- 18:30–21:00 Dinner (on your own), Mahane Yehuda Market

Tuesday, December 19, 2017

- 9:00–10:00 Christel Baier, *Probabilistic verification II*
- 10:00–10:30 Coffee Break
- 10:30–11:30 Bernd Finkbeiner, *Temporal synthesis II*
- 11:30–12:30 Orna Grumberg, *Algorithmic model checking III*
- 12:30–14:00 **Lunch, Givat Ram cafeterias**
- 14:00–16:00 Industrial Formal Verification Panel:
Cindy Eisner (IBM)
Gila Kamhi (GM)
Eytan Dreifus (Mellanox)
- 16:00–16:30 Coffee break
- 16:30–17:30 Student Spotlights
- 17:30–18:30 **Student poster session (Lighting candles & snacks)**

Wednesday, December 20, 2017

- 9:00–10:00 Javier Esparza, *Linear-time verification III*
- 10:00–10:30 Coffee break
- 10:30–11:30 Christel Baier, *Probabilistic verification III*
- 11:30–12:30 Bernd Finkbeiner, *Temporal synthesis III*
- 12:30–14:00 **Lunch, Givat Ram cafeterias**
- 14:00–16:00 Formal verification in related-areas panel:
Danny Dolev (Hebrew University), Cybersecurity
David Harel (Weizmann Institute), Computational Biology
Noam Nissan (Hebrew University), Algorithmic Game Theory
- 16:00–16:30 Coffee break
- 16:30–17:30 Bernd Finkbeiner, *Temporal synthesis IV*
- 17:30–18:30 Student Spotlights
- 18:30–19:30 **Poster session and reception, IIAS lobby (snacks & refreshments)**

Thursday, December 21, 2017

- 9:00–10:00 Orna Grumberg, *Algorithmic model checking IV*
- 10:00–10:30 Coffee break
- 10:30–11:30 Javier Esparza, *Linear-time verification IV*
- 11:30–12:30 Christel Baier, *Probabilistic verification IV*
- 12:30–13:45 **Lunch, Givat Ram cafeterias**
- 14:00– 18:00 **Tour to the Old City of Jerusalem**
- 18:30–21:00 **School Dinner – Terrassa Restaurant**

Friday, December 22, 2017

- 08:30-18:00 School Excursion: Dead Sea and Masada