



THE HEBREW UNIVERSITY OF JERUSALEM
ISRAEL INSTITUTE FOR ADVANCED STUDIES

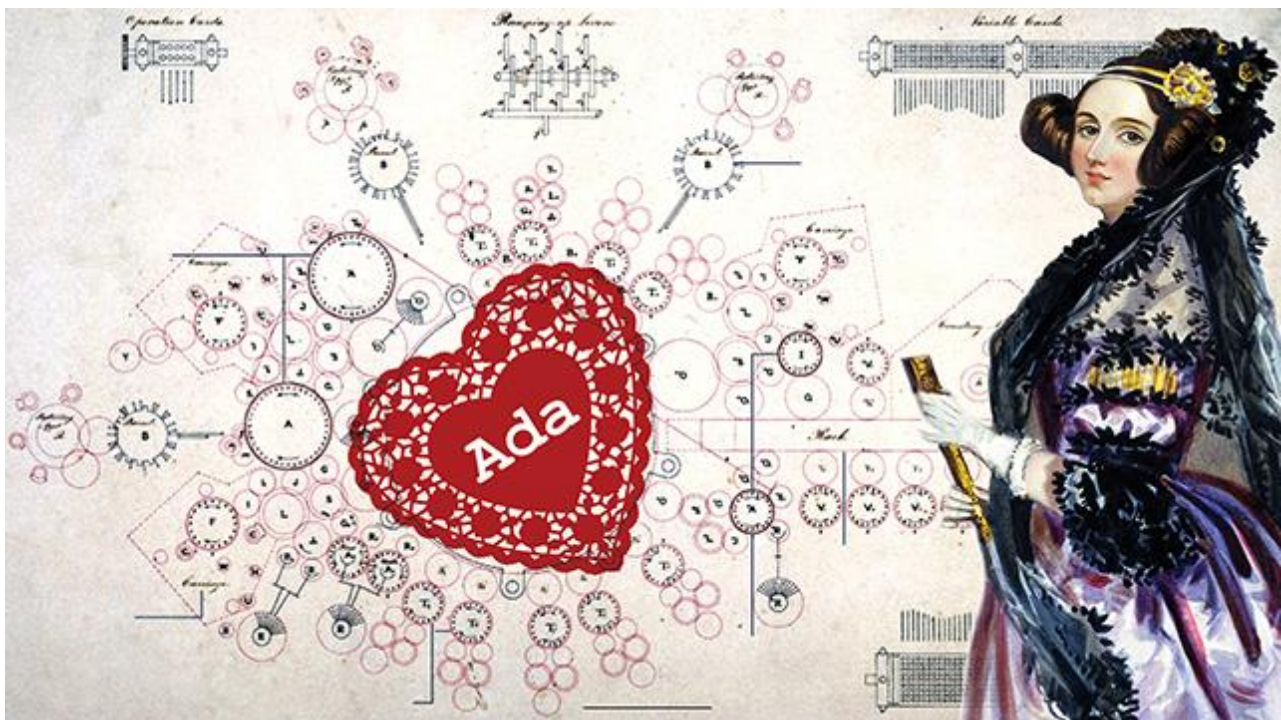
The Ada Lovelace Bicentenary Lectures on Computability

December 20, 2015 – 31 January, 2016

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

Organizers

Jack Copeland (University of Canterbury)
Eli Dresner (Tel-Aviv University)
Diane Proudfoot (University of Canterbury)



PROGRAM

Click on the title to read the abstract or view the video

Sunday, 20 December

- 11:00 - 11:15 Coffee and biscuits
- 11:15 - 12:15 [Dorit Aharonov](#) (The Hebrew University)
[Quantum Computation: Quantum Mechanics through the Computational Lens](#)
- 12:30 - 13:15 Lunch
- 13:15 - 14:15 Q & A with the lecturer
- 14:15 - 15:00 Afternoon tea

Monday, 21 December

- 11:00 - 11:15 Coffee and biscuits
- 11:15 - 12:15 [David Harel](#) (Weizmann Institute of Science)
[Computability in the Footsteps of Turing — A Personal Trip](#)
- 12:30 - 13:15 Lunch
- 13:15 - 14:15 Q & A with the lecturer
- 14:15 - 15:00 Afternoon tea

Tuesday, 22 December

- 11:00 - 11:15 Coffee and biscuits
- 11:15 - 12:15 [Yuri Gurevich](#) (Microsoft Research)
[What is an Algorithm?](#)
- 12:30 - 13:15 Lunch
- 13:15 - 14:15 Q & A with the lecturer
- 14:15 - 15:00 Afternoon tea

Wednesday, 23 December

- 11:00 - 11:15 Coffee and biscuits
- 11:15 - 12:15 [Moshe Y. Vardi](#) (Rice University)
[Humans, Machines, and the Future of Work](#)
- 12:30 - 13:15 Lunch
- 13:15 - 14:15 Q & A with the lecturer
- 14:15 - 15:00 Afternoon tea

Thursday, 31 December

- 11:00 - 11:15 Coffee and biscuits
- 11:15 - 12:15 [Scott Aaronson](#) (MIT)
[Explorations in Universality](#)
- 12:30 - 13:15 Lunch
- 13:15 - 14:15 Q & A with the lecturer
- 14:15 - 15:00 Afternoon tea

Monday, 18 January

- 10:45 - 11:00 Coffee and biscuits
- 11:00 - 11:30 [Aviezri Fraenkel](#) (Weizmann Institute of Science)
[Opening Remarks. Weizac – An Interim Adventure Between Ada and Responsa](#)
- 11:30 - 12:30 [Doron Swade](#) (Royal Holloway, University of London)
[Myths and Method: Ada Lovelace, Charles Babbage, and the First Computer Program](#)
- 12:30 - 13:30 Lunch
- 13:30 - 14:00 Q & A with Doron Swade
- 14:00 - 15:00 Screening of [To Dream Tomorrow](#), an award-winning documentary on Ada Lovelace
- 15:00 - 15:30 Q & A with the directors, [Jo Francis](#) (Flare Productions) and [John Fuegi](#) (Flare Productions)
- 15:30 - 16:00 Afternoon tea

Tuesday, 19 January

- 10:45 - 11:00 Coffee and biscuits
- 11:00 - 12:30 [Michael Rabin](#) (Harvard University)
[Zero Knowledge Proofs and Applications](#)
- 12:30 - 13:30 Lunch
- 13:30 - 15:00 [Jo Francis](#) (Flare Productions) and [John Fuegi](#) (Flare Productions)
[Looking for Lovelace](#)
- 15:00 - 15:45 Afternoon tea
- 16:00 - 17:00 [Moshe Y. Vardi](#) (Rice University)
[From Aristotle to the iPhone](#)

Wednesday, 20 January

- 10:45 - 11:00 Coffee and biscuits
- 11:00 - 12:30 [Susan Stepney](#) (York University)
[When Does a Slime Mould Compute?](#)
- 12:30 - 13:30 Lunch
- 13:30 - 15:00 Q & A with [Susan Stepney](#) (York University)
- 15:00 - 15:30 Afternoon tea

Thursday, 21 January

- 11:00 - 11:15 Coffee and biscuits
- 11:15 - 12:15 [Aaron Sloman](#) (Birmingham University)
[Evolved Construction-kits for Building Minds, Part I](#)
- 12:30 - 13:30 Lunch
- 13:30 - 14:30 [Evolved Construction-kits for Building Minds, Part II](#)
- 14:30 - 15:00 Afternoon tea

Monday, 25 January

- 11:15 - 12:15 [Nachum Dershowitz](#) (Tel Aviv University)
[Proving the Church-Turing Thesis](#)
- 12:30 - 13:30 Lunch
- 13:30 - 14:30 Q & A with the lecturer
- 15:30 - 16:00 Afternoon tea
- 16:00 - 17:30 [Avi Wigderson](#) (Institute for Advanced Study, Princeton)
[Structure in the Theory of Computing:
Algorithms, Randomness, Cryptography and Hardness](#)

Thursday, 28 January

10:45 - 11:00 Coffee and biscuits

11:00 - 12:30 [Radia Perlman](#) (EMC Corporation)
[How to Build an Insecure System out of Perfectly Good
Cryptography](#)

12:30 - 13:30 Lunch

Sunday, 31 January

16:30 - 17:00 Afternoon tea

17:00 - 18:30 [Stewart Shapiro](#) (Ohio State University)
[Computing with Numbers and Other Non-Syntactic Things](#)