על תולדות החישוב ומהותו

The Origins and Nature of Computation

Monday 12 June, at Tel Aviv University, Recanati Building (Hall 405)

10:00-12:00
Greetings:
Dany Leviatan (Rector, Tel Aviv University)
Leo Corry (Director, The Cohn Institute for the History and Philosophy of Science and
        Ideas, Tel Aviv University)

Chair: Dany Leviatan (Tel Aviv University)
Keynote address: **Michael Rabin** (Hebrew University and Harvard University): Theory of
        Computing and Algorithms, A New Field of Mathematics

13:30-15:30
Chair: Amnon Eden (University of Essex)

Doron Swade (University of Portsmouth): A Prehistory of Automatic Computing: Charles
        Babbage's Calculating Engines
Martin Campbell-Kelly (University of Warwick): Victorian Data Processing

16:00-18:00
Chair: Eva Jablonka (Tel Aviv University)

Jack Copeland (University of Canterbury): Electronic Computing, 1943-1950: From
Flowers' Colossus to Turing's ACE
Leo Corry (Tel Aviv University): Number Crunching vs. Number Theory: Computers and
Fermat's Last Theorem from Kummer to SWAC (1850-1950)

Tuesday 13 June, at Tel Aviv University, Gilman Building (Hall 496)

10:00-12:00
Chair: Gualtiero Piccinini (University of Missouri-St. Louis)

Wilfried Sieg (Carnegie Mellon University): Church without Dogma - Axioms for
Computability
Stewart Shapiro (Ohio State University): Computability, Proof, and Open-Texture

13:00-15:00
Chair: Arnon Avron (Tel Aviv University)

Oron Shagrir (Hebrew University): Gödel on Turing on Computability
Martin Davis (New York University): The Church-Turing Thesis: Consensus and
Opposition.

15:30-16:30
Chair: Carl Posy (Hebrew University)

Saul Kripke (City University of New York): From Church's Thesis to the First Order
Algorithm Theorem

Wednesday 14 June, at the Van Leer Jerusalem Institute

10:00-12:00
Chair: Ofra Rechter (Tel Aviv University)

Teresa Numerico (University of Salerno): Unorganized and Self-Modifying Devices:
Alan Turing's Legacy for a New Idea of Intelligent Machinery
Eli Dresner (Tel Aviv University): Turing on Computation, Memory and Behavior

Chair: Amit Hagar (Indiana University, Bloomington)

Dorit Ahronov (Hebrew University): Quantum Computation: The Hype and Beyond
Ehud Shapiro (Weizmann Institute): What is a Computer? The World is not enough to
     Answer

Symposium on *The origins of computer technology and computer science in Israel*
Greetings:
Shimshon Zelniker (Director, The Van Leer Jerusalem Institute)

Chair: Eli Shamir (Hebrew University)

Orna Berry (Gemini): General Purpose and Specific
Abraham Ginzburg (Technion, Haifa): Computer Science and Applications in the
     Technion and in the Haifa Region during the Years 1950-1970
Eli Shamir (Hebrew University): Impact and Evolvement of Computer Science at the
     Hebrew University,1956-1980
Amiram Shore (E.N.T. Exceptional New Technologies): From the Round World to the
     Flat World - From Pioneering to the Silicon State
Yossi Vardi (International Technologies Ventures): Israel's Secret Source.

Thursday 15 June, at the Van Leer Jerusalem Institute

Chair: Michael Ben-Or (Hebrew University)

Michael Mahoney (Princeton University): The Structures of Computation: The Origins of
     Theoretical Computer Science
David Harel (Weizmann Institute): Exposing the Limits of Computing: How to Tell
     the Wonderful Story of Computability and Complexity
Boaz Trakhtenbrot (Tel Aviv University): On Theoretical Computer Science beyond the
     Iron Curtain

13:30-15:30
Chair: Giora Hon (Haifa University)

William Aspray (Indiana University, Bloomington): The Rise of India as a Global Player
in Information Technology: The Roles of Technical Education, Economic
Advantage, Policy, and Global Markets
Jonathan Bowen (London South Bank University): A Brief History of Museums Online:
Widening Worldwide Access

16:00–17:00
Chair: Michael Rabin (Hebrew University, Harvard University)

Closing address: **John McCarthy** (Stanford University): Formalizing Common Sense
Knowledge in Mathematical Logic

For information:
The Van Leer Jerusalem Institute: 43, Jabotinsky Street, Jerusalem
Tel. 972-2-5605216, 5605282, shulamitl@vanleer.org.il; shagrir@cc.huji.ac.il

Organizing Committee:

• Jack Copeland (Professor of Philosophy and Director of the Turing Archive for the
History of Computing, The University of Canterbury, New Zealand)

• Carl Posy (Philosophy, Hebrew University)

• Oron Shagrir (Philosophy and Cognitive Science, Hebrew University)