



The Edelstein Center for the History and Philosophy of Science, Technology and Medicine



MATHEMATICAL KNOWLEDGE AND ITS APPLICATIONS

The Twenty-Fifth Annual International Workshop on the History and Philosophy of Science
In Honor of Mark Steiner

Monday-Wednesday, December 12-14, 2011 Tel-Aviv and Jerusalem

MONDAY

DECEMBER 12
TEL AVIV UNIVERSITY

Morning Session 10:00-13:00

lan Hacking, Collège de France and University of Toronto **The Lure of Pythagoras**

Roy Wagner, The Hebrew University of Jerusalem

Mathematical Metaphors: A Historically and Philosophically Informed Approach

11:45-12:00 Coffee Break

Stewart Shapiro, Ohio State University **The Classical Continuum Without Points**

13:00-14:00 Visit to the Exhibition:

Transcending Tradition: Jewish Mathematicians in German-Speaking Academic Culture

Beit Hatfutsot Museum, Tel Aviv University

14:00-15:00 Lunch Break

Afternoon Session 15:00-17:30

Margaret Morrison, University of Toronto Beyond Calculation: Extracting Physical Information from Mathematical Methods

Orly Shenker, The Hebrew University of Jerusalem

The Mathematical Representation of the Arrow of Time

Michael Katz, Haifa University
Approximation Logic for Quantum Theory

TUESDAY

DECEMBER 13
THE VAN LEER JERUSALEM
INSTITUTE

Morning Session 9:30-13:00

Curtis Franks, Notre Dame University **Sacred Inference**

Meir Buzaglo, The Hebrew University of Jerusalem

Symmetry and the Unity of God

11:45-12:00 Coffee Break

Ruth Glasner, The Hebrew University of Jerusalem

Sefer Meyasher Akov by Alfonso: An Unusual Medieval Hebrew Mathematical Text

Stela Segev, Lifshitz College of Education Jerusalem

Pre-inductive Methods in Mizrachi's *Book* of the Number

13:00-14:00 Lunch Break

Afternoon Session
14:00-18:00

Paolo Mancosu, University of California, Berkeley

Axiomatics and Purity of Methods: On the Relationship Between Plane and Solid Geometry

Sorin Bangu, University of Illinois Wynn's Experiments and Later Wittgenstein's Philosophy of Mathematics

Yemima Ben-Menahem, The Hebrew University of Jerusalem Symmetry and Causation

16:00-16:15 Coffee Break

Saul Kripke, Graduate Center, CUNY Wittgenstein, Logicism, and "Buck-Stopping" Identifications of Numbers

WEDNESDAY

DECEMBER 14 THE VAN LEER JERUSALEM INSTITUTE

Morning Session 10:00-13:00

Shlomo Sternberg, Harvard University Category Theory at the Interstices: Between Classical and Quantum Physics

Leo Corry, Tel Aviv University **Category Theory and Bourbaki: A Story of Incompatibility**

11:45-12:00 Coffee Break

Carl Posy, The Hebrew University of Jerusalem
Three Dogmas of Constructivism

13:00–14:00 Lunch Break

Afternoon Session

Symposium: **Beauty and Aesthetic Considerations in Mathematics**

Ehud Hrushovski, The Hebrew University of Jerusalem

Menachem Magidor, The Hebrew University of Jerusalem

Philip Rosenau, Tel-Aviv University

Aner Shalev, The Hebrew University of Jerusalem

Moderator: Leo Corry, Tel Aviv University

Concluding Remarks 16:00-16:30

Mark Steiner, The Hebrew University of Jerusalem

Venues: