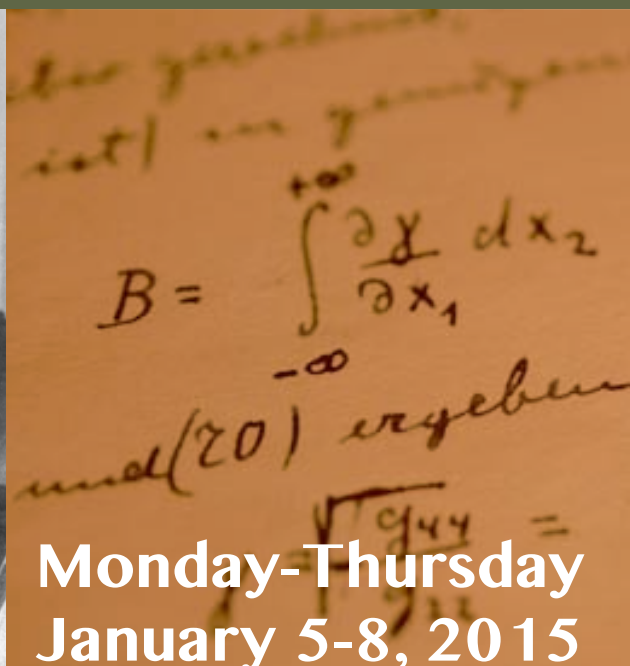


Space-Time Theories: Historical and Philosophical Contexts



Monday, January 5, 2015

At the Van Leer Jerusalem Institute

**Monday-Thursday
January 5-8, 2015
in Jerusalem**

Morning Session: Einstein Studies

10:00-13:00

Peter Dougherty, Princeton University Press
Reflections on the Einstein Papers Project

Diana Kormos-Buchwald, Einstein Papers Project, Caltech
News from the Editorial Desk of the Collected Papers of Albert Einstein

Hanoch Gutfreund, the Hebrew University of Jerusalem
The Story of Einstein's "Popular Booklet" and the Reception of Relativity

Coffee Break 11:30-12:00

Jurgen Renn (with **Michel Janssen**), Max Planck Institute for the History of Science, Berlin
Einstein's 1913 Vienna Lecture: Modeling Gravitational Theory on Electrodynamics

Lunch Break 13:00-14:00

Afternoon Session: Einstein and His Methodology

14:00-17:30

Jeroen van Dongen, University of Amsterdam, and Utrecht University
A Virtuous Theorist's Theoretical Virtues: Einstein on Physics vs. Mathematics and Experience vs. Unification

Robert Disalle, University of Western Ontario
Geometry, Experience and General Relativity: On the Ineffective Reasonableness of Mathematics

Coffee Break 16:00-16:30

Tilman Sauer, University of Bern
Einstein's Inferential Conception of the Application of Mathematics

17:30-18:30

Bergmann Centenary

Donald C. Salisbury, Austin College Texas, and Max Planck Institute for the History of Science, Berlin
Peter G. Bergmann (1915-2002): A World Point That Will Never Fade

19:00 – Welcome Dinner at Yemima's (Invitees Only)

Tuesday
January 6, 2015

At the Van Leer Jerusalem Institute

Morning Session: The Renaissance of General Relativity

9:00-11:00

Roberto Lalli, Max Planck Institute for the History of Science, Berlin

Building the Relativity Community in the Post-World War II Era: The Role of Communication Channels and Stabilization Processes in the Renaissance of General Relativity

Alexander Blum, Max Planck Institute for the History of Science, Berlin

The Schism: The Origins of Canonical and Covariant Quantum Gravity

Coffee Break 11:00-11:30

Daniel Kennefick, University of Arkansas, and the Einstein Papers Project, Caltech
The Construction of the Asymptotic Structure of Spacetime

Dennis Lehmkühl, IZWT, University of Wuppertal, and Einstein Papers Project, Caltech
Einstein, Cartan, Weyl, Jordan: The Neighborhood of General Relativity in the Space of Spacetime Theories

Lunch Break 13:30-15:00

Afternoon Session: Time

15:00-18:30

Lee Smolin, Perimeter Institute (Video)
Time and Law in a Cosmological Context

Yuval Dolev, Bar-Ilan University
Can Physics End Time?

Coffee Break 17:00-17:30

Meir Hemmo, Haifa University
Orly Shenker, the Hebrew University of Jerusalem
Macroscopic and Microscopic Arrows of Time

Wednesday
January 7, 2015

Joint day with the Jerusalem Winter School in Theoretical Physics at the Hebrew University of Jerusalem the Edmond J. Safra Campus
Feldman Building: Hall 130

Morning Session: The History of General Relativity

9:00-12:30

Leo Corry, Tel-Aviv University
Einstein Meets Hilbert on the Way to General Relativity: Who Arrives First?

Jürgen Renn (with **Alexander Blum**), Max Planck Institute for the History of Science, Berlin

The Renaissance of General Relativity: A New Reading

Coffee Break 11:00-11:30

Round Table: The History of General Relativity

Lunch Break 12:30-14:00

Afternoon Session: General Relativity in Contemporary Physics

14:00-17:30

Round Table: Astrophysics
Moderator: **David Gross**, the University of California Santa Barbara

Coffee Break 15:30-16:00

Round Table: String Theory
Moderator: **David Gross**, the University of California Santa Barbara

17:30-18:30

Musical Interlude

Violinist **Rinat Erlichman** will play chapters of violin sonatas by Ysaye and Bach

Exhibit: Selected Documents from the Einstein Archive

With **Hanoch Gutfreund**, the Hebrew University of Jerusalem

Thursday
January 8, 2015

At the Van Leer Jerusalem Institute

Morning Session: Quantum Gravity

9:30-13:00

Kip Thorne, Caltech
Geometrodynamics: The Nonlinear Dynamics of Curved Spacetime

Carlo Rovelli, Aix-Marseille University
Quantum Spacetime

Coffee Break 11:30-12:00

Gordon Belot, University of Michigan
A Philosophical Tour of de Sitter Spacetime

Lunch Break 13:00-14:30

Afternoon Session: Quantum Mechanics and Spacetime

14:30-16:30

Daniel Rohrlich, Ben-Gurion University of the Negev
Retrocausality as an Axiom

Yemima Ben-Menahem, the Hebrew University of Jerusalem
Spacetime and Nonlocality: Revisiting the Epistemic Interpretation of QM

Coffee Break 16:30-17:00

17:00-18:00 Concluding Perspectives

Gabriel Motzkin, the Van Leer Jerusalem Institute

Can There Be a New Metaphysics of Spacetime?

18:30 – Farewell Dinner
(Invitees Only)

The Van Leer Jerusalem Institute, 43 Jabotinsky St., Jerusalem Tel: 02-5605216
www.vanleer.org.il



Parking is not available at the Van Leer Jerusalem Institute. (Metered parking is available on the neighboring streets.)
Photographs taken at the workshop will be posted on the Institute's website and on social networks.

