

Please check the program for future updates



VICTOR ROTHSCHILD MEMORIAL SYMPOSIA
THE HEBREW UNIVERSITY OF JERUSALEM

The Institute for Advanced Studies

The 26th Jerusalem Winter School in Theoretical Physics

General Director: David Gross

Particle Physics in the Age of the LHC

Directors: David Gross (University of California, Santa Barbara) and Eliezer Rabinovici (The Hebrew University)

Scientific Committee: Shmuel Elitzur, Amit Giveon and Barak Kol (The Hebrew University)

29 December 2007 - 8 January 2008

CURRENT PROGRAM

MONDAY, 29.12 08

08:30-09:30	<i>Registration</i>
09:30-11:00	David Gross: <i>Opening remarks</i> Nathan Seiberg (IAS, Princeton) <i>Supersymmetry Breaking and its Mediation I</i>
11:00-11:30	<i>Coffee break</i>
11:30-13:00	Georg Raffelt (MPI Munich) <i>Axions: Motivation, Cosmological Role, and Experimental Searches I</i>
13:00-14:30	<i>Lunch at Beit Belgia</i>
14:30-16:00	Michelangelo L. Mangano (Cern) <i>Tools for the LHC: Introduction to the Physics of Hadronic Collisions I</i>
16:00-16:30	<i>Coffee break</i>
16:30-18:00	Oren Bergman (Technion) <i>Superconformal Chern-Simons Theories, M2-Branes, and Supergravity</i>
18:00-19:00	Tutorial

19:00 *Reception*

TUESDAY, 30.12.08

09:00-10:30 **Scott Thomas** (Rutgers University)
Macroscopic Supersymmetry I

10:30-11:00 *Coffee break*

11:00-12:30 **Georg Raffelt**
Axions: Motivation, Cosmological Role, and Experimental Searches II

12:30-14:30 *Lunch at Beit Belgia*

14:30-16:00 **Michelangelo L. Mangano**
Tools for the LHC: Introduction to the Physics of Hadronic Collisions II

16:00-16:30 *Coffee break*

16:30-17:30 **Ofer Aharony** (Weizmann Institute)
An Introduction to String Theoretic and Holographic Models for QCD

17:30-18:30 Tutorial

WEDNESDAY, 31.12.08

09:00-10:30 **Scott Thomas**
Macroscopic Supersymmetry II

10:30-11:00 *Coffee break*

11:00-12:30 **Georg Raffelt**
Axions: Motivation, Cosmological Role, and Experimental Searches III

12:30-14:30 *Lunch at Beit Belgia*

14:30- 16:00 **Michelangelo L. Mangano**
Tools for the LHC: Introduction to the Physics of Hadronic Collisions III

16:00-16:30 *Coffee break*

16:30-18:00 **Nathan Seiberg**
Supersymmetry Breaking and its Mediation II

18:00-19:00 Tutorial

21:00 *New Year's Eve party at the Almora Restaurant*

THURSDAY, 1.1.09

Free Morning

12:30-13:30 *Lunch at Beit Belgia*

13:30-15:00 **Scott Thomas**

Macroscopic Supersymmetry III

15:00-15:30

Coffee break

15:30-17:00

Michelangelo L. Mangano

Tools for the LHC: Introduction to the Physics of Hadronic Collisions IV

17:15-18:15

Amit Giveon (The Hebrew University)

On Dynamical SUSY and R Symmetry Breaking

18:15-19:15

Tutorial

FRIDAY 2.1.09

09:00-10:30

Yossi Nir (Weizmann Institute)

Flavor Physics I

10:30-11:00

Coffee break

11:00-12:30

Georg Raffelt

Axions: Motivation, Cosmological Role, and Experimental Searches IV

12:30

Lunch at Ramat Rachel and tour of Jerusalem's Old City

SATURDAY, 3.1.09

All-day tour to Masada and the Dead Sea

SUNDAY 4.1.09

09:00-10:30

Yossi Nir

Flavor Physics II

10:30-11:00

Coffee break

11:00-12:30

Fabiola Gianotti (Cern)

LHC Machine, Experiments and Physics I

12:30-14:30

Lunch at Beit Belgia

14:30-16:00

Juan Maldacena (IAS, Princeton)

Collider Physics in Conformal Field Theories at Weak and Strong Coupling I

16:00-16:15

Coffee break

16:15-17:50

Scott Thomas

Macroscopic Supersymmetry IV

MONDAY, 5.1.098

09:00-10:30

Fabiola Gianotti

LHC Machine, Experiments and Physics II

- 10:30-11:00 *Coffee break*
- 11:00-12:30 **Nathan Seiberg**
Supersymmetry Breaking and its Mediation III
- 12:30-14:30 *Lunch at Beit Belgia*
- 14:30-16:00 **Juan Maldacena**
Collider Physics in Conformal Field Theories at Weak and Strong Coupling II
- 16:00-16:30 *Coffee break*
- 16:30-18:00 **Yossi Nir**
Flavor Physics III
- 18:00-19:00 **Peter Freund** (University of Chicago)

TUESDAY, 6.1.09

- 09:00-10:30 **Fabiola Gianotti**
LHC Machine, Experiments and Physics III
- 10:30-11:00 *Coffee break*
- 11:00-12:30 **Juan Maldacena**
Collider Physics in Conformal Field Theories at Weak and Strong Coupling III
- 12:30-14:30 *Lunch at Beit Belgia*
- 14:30- 16:00 **Nima Arkani Hamed**
Theories of Dark Matter I
- 16:00-17:30 **Racah** Lecture (Levin Building, room 8)
High Schools Lecture (Feldman Building, room 130)
- 18:00-19:00 Tutorial

WEDNESDAY, 7.1.09

- 09:00-10:30 **Nathan Seiberg**
Supersymmetry Breaking and its Mediation IV
- 10:30-11:00 *Coffee break*
- 11:00-12:30 **Nima Arkani Hamed**
Theories of Dark Matter II
- 12:30-14:30 *Lunch at Beit Belgia*
- 14:30-16:00 **Nima Arkani Hamed** (IAS, Princeton)
Holography and the S-Matrix I
- 16:00-16:30 *Coffee break*

16:30-17:30 **Jacob Sonnenschein** (Tel Aviv University)
More on Holographic (Stringy) QCD

17:30-18:30 Tutorial

THURSDAY, 8.1.09

09:00-10:30 **Juan Maldacena**
Collider Physics in Conformal Field Theories at Weak and Strong Coupling IV

10:30-11:00 *Coffee break*

11:00-12:30 **Yossi Nir**
Flavor Physics IV

12:30-14:30 *Lunch at Beit Belgia*

14:30-16:00 **Nima Arkani Hamed**
Holography and the S-Matrix II

**All lectures will take place at the Institute for Advanced Studies
Feldman Building, Room 130 (first floor)
On the Hebrew University, Edmond J. Safra Campus at Giv'at Ram, Jerusalem**