



Sackler Prize Symposium on Topological phases in condensed matter

Honoring the Recipients of the 2014 Raymond and Beverly Sackler Prize in the Physical Sciences

Wednesday, April 9, 2014

Melamed Auditorium (No. 6), Shenkar Physics Bldg,
Tel Aviv University

Research Field for 2014:

Topological Phases in Condensed Matter

Prize recipients:

Prof. B. Andrei Bernevig, Department of Physics, Princeton University

Prof. Liang Fu, Department of Physics, Massachusetts Institute of Technology

Prof. Xiao-Liang Qi, Department of Physics, Stanford University

08:30–09:00 *Gathering and Coffee*

MORNING SESSION

Alexander Palevski, chair

Tel Aviv University, School of Physics and Astronomy

09:00–09:40 **Ady Stern**

"Engineered non-Abelian anyons beyond Majorana fermions"

Weizmann Institute of Science, Department of Physics

09:40–10:20 **Eran Sela**

"Quantum transport and topological phases in fractional helical wires"

Tel Aviv University, School of Physics and Astronomy

10:20–10:50 *Coffee break*

NOON SESSION

Moshe Goldstein, chair

Tel Aviv University, School of Physics and Astronomy

10:50–11:30 **Netanel Lindener**

"Light-induced topological phenomena"

Technion Israel Institute of Technology, Department of Physics

סימפוזיון "פרס סאקלר" בנושא פאזות טופולוגיות בחומר מעובה

לכבוד הזוכים בפרס במדעים הפיזיקאליים
ע"ש ריימונד ובברלי סאקלר לשנת 2014

יום רביעי, ט' בניסן תשע"ד, 9.4.2014,

אודיטוריום בוריס ולנה מלמד, בניין לפיזיקה

ע"ש רבקה ואריה שנקר, קריית האוניברסיטה, רמת אביב

11:30–12:30 Student session:

Eran Maniv

"Evolution of the Fermi surface of a doped topological insulator with carrier concentration"

Tel Aviv University, School of Physics and Astronomy

Yuval Ronen

"Majorana fermions in superconductor semiconductor nanowire devices"

Weizmann Institute of Science, Department of Physics

Alon Ron

"Conductance quantization and anomalous magnetism in oxide interface based wires"

Tel Aviv University, School of Physics and Astronomy

12:30–14:00 *Lunch Buffet: "Gan Hadekalim"*

AFTERNOON SESSION

Yoram Dagan, chair

Tel Aviv University, School of Physics and Astronomy

14:00–14:30 Prize Ceremony

Joseph Klafter

TAU President, Presiding

14:30–15:20 **B. Andrei Bernevig**

"Topological states of matter"

Princeton University, Department of Physics

15:20–16:10 **Liang Fu**

"Topological materials"

Massachusetts Institute of Technology, Department of Physics

16:10–17:00 **Xiao-Liang Qi**

"Topological field theory description of topological states of matter"

Stanford University, Department of Physics