

**The 55<sup>th</sup> meeting of the Israel Physics Society  
Bar Ilan University, Ramat Gan, Israel  
Sunday, 13 December 2009**

**55**



**האגודה הישראלית לפיסיקה אוניברסיטת בר אילן  
Bar Ilan University Israel Physical Society**



**הכנס ה- 55 של האגודה הישראלית לפיסיקה  
אוניברסיטת בר אילן, רמת גן, ישראל  
כו' כסלו התש"ע – נר שני של חנוכה**

**Bulletin Of The  
ISRAEL PHYSICAL SOCIETY**

Volume 55, 2009

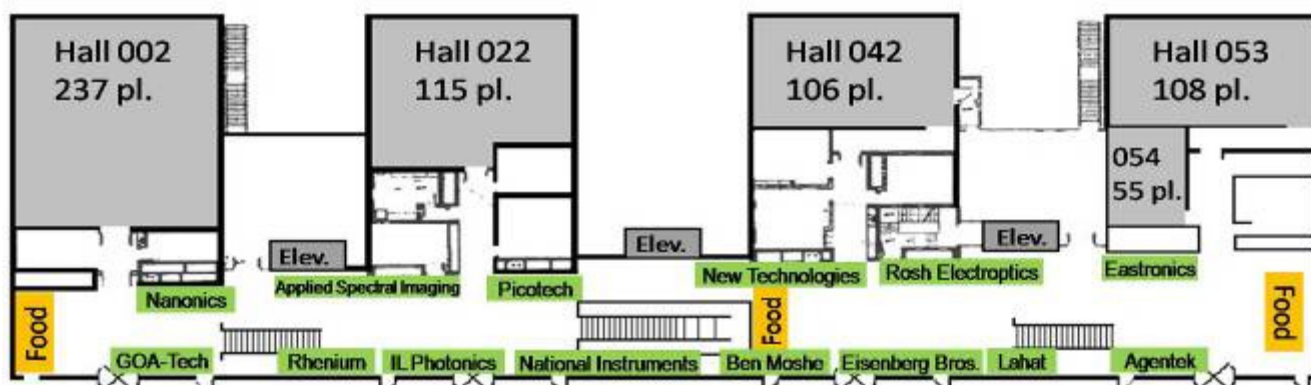
## Program at a glance

Time	Session & details			Place
08:30 – 09:15	<b>Registration and coffee</b>			<i>Wohl center</i>
09:15 – 09:45	<i>Opening: Prof. Aviad Frydman (BIU, Physics)</i> <i>Greetings: Prof. Daniel HersHKovitz, Israel Minister of Science &amp; Technology</i> <i>Welcome: Prof. Moshe Kaveh (BIU president)</i> <i>Greetings &amp; prizes: Prof. Avishai Dekel (HUJI, IPS President)</i>			<i>Wohl center</i>
09:45 – 10:30	<i>Planery lecture: David Spergel, Princeton USA</i> <b>The New Standard Cosmology; Dark Matter, Dark Energy and the Beginning of the Universe</b>			<i>Wohl center</i>
10:30 – 11:00	<b>Coffee break (&amp; registration)</b>			<i>Wohl center</i>
11:00 – 12:00	<b>Review I, Hall I</b> High energy & Astrophysics <i>Chair: Larry horowitz</i>	<b>Review II, Main Hall</b> Quantum & Solid state physics <i>Chair: Michael Reznikov</i>	<b>Review III, Hall II</b> Biophysics & Statistical physics <i>Chair: Benjamin Ehrenberg</i>	<i>Wohl center</i>
	<i>Reinhard Genzel</i> <b>Massive black holes &amp; galaxies</b>	<i>Y. Oreg (WIS)</i> <b>Topological Insulators</b>	<i>Nathalie Q. Balaban (HU)</i> <b>Noise in Bio systems</b>	
	<i>E. Duchovni (WIS)</i> <b>Prospects for SUSY at LHC</b>	<i>J. Mannhart (Augsburg)</i> <b>2DEG at Oxide Interfaces</b>	Morton Denn (NY, USA) <b>Field Stress Fluids</b>	
12:00 – 14:00	<b>Lunch (included)</b> <b>Trade center &amp; Posters</b>			<i>Eng. School</i>
14:00 – 15:30	Parallel session I:			<i>Eng. School</i>
	A1. High energy physics <b>Room 243</b>	A2. Superconductivity & magnetism I <b>Room 022</b>	A3. Astrophysics I <b>Room 244</b>	
	A4. Low dimensions & nanosystems I <b>Room 053</b>	A5. Soft matter & Biophysics I <b>Room 271</b>	A6. Statistical & Nonlinear physics I <b>Room 002</b>	
	A7. Quantum information <b>Room 106</b>	A8. Optics <b>Room 042</b>	A9. Material physics <b>Room 249</b>	
15:30 – 16:00	<b>Coffee break</b>			
16:00 – 17:30	Parallel session II			<i>Eng. School</i>
	B1. High energy physics II <b>Room 243</b>	B2. Superconductivity & magnetism II <b>Room 022</b>	B3. Astrophysics II <b>Room 244</b>	
	B4. Low dimensions & nanosystems II <b>Room 053</b>	B5. Soft matter & Biophysics II <b>Room 271</b>	B6. Statistical & Nonlinear physics II <b>Room 002</b>	
	B7. Cold atoms <b>Room 042</b>	B8. Plasma physics <b>Room 249</b>	B9. Educational physics <b>Room 239</b>	
17:45 – 18:30	<i>Plenary lecture: Stefan Hell, Max Planck Institute, Göttingen, Germany</i> <b>Far field optical nanoscopy</b>			

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## IPS MAIN BUILDING MAP & LECTURE ROOMS



### Other rooms:

1. 271: 70 pl.
2. 244: 45 pl.
3. 243: 46 pl.
4. 249: 70 pl.
5. Meeting room 329: 40 pl

### Poster session:

1<sup>st</sup> floor (stairs or elevator)

## Welcome message



Bar Ilan University welcomes all participants of the 55<sup>th</sup> annual meeting of the Israel Physical Society. The meeting will take place in the northern campus which was not yet built in the last IPS meeting held at BIU six years ago. You are all welcome to visit the new nano-center building which is being occupied these very days.

This year's meeting consists of two plenary talks, one opening the day and the other closing it. The first will be given by David Spergel from Princeton dealing with cosmology and the second by Stephan Hell from Goettingen on nanoscopy. We therefore cover over 36 orders of magnitude throughout the day. As in previous years, we will have three review sessions. These include talks which are meant for a broad audience on a central topic; hence they do not require being an expert in the field in order to participate.

We also have 18 parallel sessions on specific fields in physics. Unlike the past two meetings, we have limited the number of contributed talks. Each session chair was given the freedom to construct the session as he saw fit. As a result, some sessions include invited talks and the contributed talks may slightly vary in length. Please refer to program for details on specific sessions.

We have put a large emphasis on the poster session which is held on the first floor of the engineering building in parallel with the lunch break. Two hours have been dedicated for this session. Part of lunch will be served in the poster area and everyone is welcome to view and discuss the posters. We will be giving prizes for best posters in four different categories.

This year there will be a large trade fair. 15 companies will be presenting in the main lobby of the engineering building. I encourage everyone to visit them.

I would like to thank the members of the organizing committee, Yuval Garini who did most of the work organizing this conference and Efrat Shimshoni who assisted with the scientific organization. I thank all session chairs for their help. I am grateful to the Bar Ilan physics department and its students for assistance in running the meeting.

I wish everyone a useful and enjoyable meeting

Aviad Frydman, Chair of the organizing committee

## From the President of the IPS



On behalf of the Israel Physical Society (IPS), I wish to welcome all of you to the 55th annual General Assembly (2008), held this year in Bar Ilan University.

The IPS is a voluntary non-profit association which acts to stimulate physics research and education in Israel. Membership is open to all physicists, from Israel and abroad, including students and all those who conduct research and education in physics. An IPS membership carries partial memberships in the APS, EPS and CAP, involving reduced rates in symposia and subscriptions and eligibility to serving in their committees.

We are in a process of trying to revamp the IPS status and activity. Our aim is to make it a worthwhile organization for the benefit of our physics community, following the examples set by the APS and EPS, and adding special features relevant to physics in Israel.

Our current emphasis is on improving the content and format of our annual meetings, establishing IPS named prizes, solidifying the IPS magazine PhysicaPlus, upgrading the IPS webpage and creating a timely News Letter, setting up joint activities with sister societies in Israel and abroad as well as with the Israeli Academy of Sciences, and enlarging the body of IPS members both within the institutions of high education and among teachers and researchers in the industry.

On the administrative side, thanks to an intense effort by our treasurer, Israel Mardor, we have concluded the very long-term formal process of registration as a society and balancing our budget.

I would like to highlight the IPS prize for a young physicist that is being awarded this year for the second time, to a physicist less than 10 years after the PhD, for special excellence in research. The winner has been selected by a distinguished committee, based on nominations made by the deans/chairs of physics in the institutions of high education and the industry. The award is tentatively set to a starting sum of 10,000 shekels, and we are working on naming it and crystallizing the long-term funding for it. The aim is to make it the most prestigious prize for a young physicist in Israel, and we try to establish co-sponsorship by the Israeli Academy of Sciences.

This is in addition to four prizes for physics graduate students, which we attempt to revamp as well. The traditional prizes in experimental physics and in theoretical physics are now complemented by two new named prizes: the Ze'ev Fraenkel prize in particle physics, nuclear physics and astrophysics (sponsored by the Fraenkel family), and the Lise Katz prize in Nano Science (sponsored by the Ilse Katz Institute for Nanoscale Science and Technology at BGU).

The scientific organizing committee led by Aviad Frydman, with Yuval Garini and Efrat Shimshoni, and guided by the IPS council, has put together an exciting program. The assembly starts with a plenary session and concludes with a plenary session at the end of the day. It includes three rich review sessions, as first introduced in IPS06 at the Hebrew University. Following IPS07 in the Weizmann Institute, the parallel sessions are organized along the lines of the APS' March meeting, comprising of an invited talk followed by 10+2 minutes long contributed talks.

The IPS activities are managed by a council representing the member institutions. We have elected a new vice president this year, Igal Meir of BGU.

I wish to thank each of the council members for their contribution to our current revamp campaign.

In order to allow all the above and more, the IPS needs your support. To begin with, this is by becoming a member and paying the annual fees. We have finally established a web registration procedure that allows each of us to register and pay online on the IPS website [www.israelphysicalsociety.org](http://www.israelphysicalsociety.org).

In addition, you can make an impact by encouraging all your associates to join the IPS, especially students. But most important would be your participation in the council work by contributing ideas for new initiatives or for potential funding sources.

I wish us all an enjoyable meeting, and a year of productive activity in physics research and education.

Avishai Dekel,  
President of the IPS

## IPS 2009 Students Prizes

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1. **IPS Prize in theoretical Physics - Moshe Goldstein**, Bar Ilan University - for innovative contributions to the theory of zero and one dimensional interacting electronic systems.
2. **IPS Prize in experimental Physics** – Ofer Firstenberg, Technion - for innovative work on the effects of atomic motion and collisions in electromagnetically induced transparency systems.
3. **The Ze'ev Fraenkel Prize in Particle Physics, Nuclear Physics and Astrophysics - Kfir Blum**, Weizmann Institute - for contributions to the understanding of theories that go beyond the standard model of particle physics.
4. **IPS Ilse Katz Prize in Nano-Science**, Dov Steiner, Hebrew University, for scanning tunneling studies of hybrid semiconductor noncrystal systems

## IPS 2009 Prize for a Young Scientist

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This prize by the Israel Physical Society, is awarded for the second time, and meant to be the most prestigious prize for a physicist in Israel. It is awarded to **Ehud Altman** from the Weizmann Institute of Science.

## The Israel Physical Society

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- President: Avishai Dekel, *Racah Inst. of Physics, Hebrew University, Jerusalem*, dekel@phys.huji.ac.il
- Vice President: Meir Igal, *Department of Physics, Ben Gurion University*, ymeir@bgu.ac.il
- Treasurer: Israel Mardor, *Soreq NRC*, mardor@soreq.gov.il
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- Council member: Itzhak Tserruya, *Faculty of Physics, Weizmann Institute of Science*, tserruya@clever.weizmann.ac.il
- Secretary: Dikla Soae, *Racah Inst. of Physics, Hebrew University, Jerusalem*, ips@phys.huji.ac.il

## Local organizing committee at Bar Ilan University

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- Aviad Frydman (Chair)
- Yuval Garini
- Efrat Shimshoni

## Session chairs

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- Yaron Oz (TAU) High Energy Physics I
- Assa Auerbach (TEC) Superconductivity and Magnetism I
- Avi Schiller (HU) Low dimensional & Nanosystems I
- Adi Vaknin (HU) Soft matter and Biophysics I
- Ron Lifshitz (TAU) Statistical & Nonlinear Physics I
- Nadav Katz (HU) Quantum Information
- Oren Cohen (TEC) Optics
- Ehoud Pazy (NRCN) Material Physics
- Eilam Gross (WIS) High Energy Physics II
- Lior Klein (BIU) Superconductivity and Magnetism II
- Motti Heiblum (WIS) Low dimensional & Nanosystems II
- Roni Granek (BGU) Soft matter and Biophysics II
- Doron Cohen (BGU) Statistical & Nonlinear Physics II
- Lev Khaykovich (BIU) Cold Atoms
- Amnon Fruchtman (HIT) Plasma Physics
- Michael Savin (WIS) Educational Physic
- Larry Horowitz Review I: High Energy & Astrophysics
- Michael Reznikov (TEC) Review II: Condensed matter physics
- Benjamin Ehrenberg (BIU) Review III: Biophysics & statistical physics



## Sponsors

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We would like to thank our sponsors

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Physics Department**



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**Bar-Ilan University  
Research Authority**



**Bar-Ilan University  
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**Bar-Ilan Institute of  
Nanotechnology and  
Advanced Materials**



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 <p>IL PHOTONICS</p>	 <p>NANONICS IMAGING Ltd.</p>
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## Plenary sessions

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- 09:45 – 10:30  
Wohl Center, Main Hall  
David Spergel, Princeton USA  
**The New Standard Cosmology; Dark Matter, Dark Energy and the Beginning of the Universe**
- 17:45 – 18:30  
Brain Research Center  
Stefan Hell, Max Planck Institute, Goettingen, Germany  
**Far field optical nanoscopy**

## Review Sessions

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### Review I: High Energy and Astrophysics

Chair: Larry Horowitz,  
Place: Wohl Center, Hall I

- 11:00 – 11:30  
Reinhard Genzel  
**Massive black holes and Galaxies**
- 11:30 – 12:00  
E. Duchovni, Weizmann Institute  
**Prospects for SUSI at LHC**

### Review II: Quantum and Solid State Physics

Chair: Michael Reznikov  
Place: Wohl Center, Main Hall

- 11:00 – 11:30  
Yuval Oreg, Weizmann Institute  
**Topological Insulators**
- 11:30 – 12:00  
J. Mannhart  
**2DEG at Oxide Interfaces**

### Review III: Biophysics and Statistical Physics

Chair: Benjamin Ehrenberg (BIU)  
Place: Wohl Center, hall II

- 11:00 – 11:30  
Nathalie Q. Balaban, Hebrew University  
**Noise in Bio Systems**
- 11:30 – 12:00  
Morton Denn, NY, USA  
**Field Stress Fluids**

## Parallel sessions

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### A1: High Energy Physics I

Chair: Yaron Oz, Tel Aviv University

Place: Eng. School, Room 243

- 14:00 – 14:18      Dmitry Melnikov, Tel Aviv University  
**Stability of asymptotically Schrödinger RN Black Hole and Superconductivity**
- 14:18 – 14:36      Boaz Keren Zur, Tel Aviv University  
**Phenomenology of metastable SUSY breaking**
- 14:36 – 14:54      Leon Berdichevsky, Ofer Aharony, Micha Berkoos, Yonit Hochberg, Daniel Robles-Llana, Weizmann Institute of Science  
**Inverted Sparticle Hierarchies from Natural Particle Hierarchies**
- 14:54 – 15:12      Masanori Hanada, Department of Particle Physics and Astrophysics, Weizmann Institute of Science  
**Recent results on D0-brane quantum mechanics**
- 15:12 – 15:30      Merav Hadad, Ram Brustein, Ben Gurion University  
**The Einstein equations for generalized theories of gravity and the thermodynamic relation  $\Delta Q = T\Delta S$  are equivalent**

### A2: Superconductivity and Magnetism I

Chair: Assa Auerbach, Technion

Place: Eng. School, Room 022

- 14:00 – 14:13      N. Bachar, E. Farber, M. Roth, Technion  
**Far infrared conductivity of overdoped YBCO thin films**
- 14:13 – 14:26      Gil Drachuck, Meni Shay, Galina Bazalitski, Amit Keren, Technion  
**Progress in the growth of large high-Tc-superconductors single crystals**
- 14:26 – 14:39      Amir Erez, Yigal Meir, Ben Gurion University  
**The superconductor-insulator transition in disordered thin films**
- 14:39 – 14:52      Daniel Golubchik, Emil Polturak, Gad Koren, Technion  
**Spontaneous vortex formation in quenched superconductor**
- 14:52 – 15:05      Yuval Lubashevsky, Amit Kanigel, Technion  
**The Superconducting gap in Zn-substituted Bi2212**
- 15:05 – 15:18      Boris Shapiro, Bar Ilan University  
**Maximal persistent current in type II superconductors with artificial pinning array**
- 15:18 – 15:31      Ofer Yuli, Racah Institute of Physics, The Hebrew University of Jerusalem  
**Evidence for preformed pairs and anti-phase ordering in La<sub>2-x</sub>Sr<sub>x</sub>CuO<sub>4</sub> thin films**

### A3: Astrophysics I

Chair:

Place: Eng. School, Room

- 14:00 – 14:30 Itzhak Goldman, Afeka, Tel Aviv Academic College of Engineering  
**The Effective Tidal Viscosity in Close Solar-Type Binaries**
- 14:30 – 14:45 Moshe Friedman, Gitai Feinberg, Michael Paul, Alexander Arenshtam, Dan Berkovits, Danny Kijel, Ido Silverman, Racah Institute of Physics, Hebrew University  
**Lithium Targets as Neutron Sources for Nuclear Astrophysics at the Soreq Applied Research Accelerator Facility**
- 14:45 – 15:00 **IPS Prize Winner: Kfir Blum**, Boaz Katz, Eli Waxman, Weizmann Institute of Science  
**What can we really learn from positron flux 'Anomalies'?**
- 15:00 – 15:15 Asher Yahalom, Ariel University Center of Samaria  
**Stability of Radial Perturbations for Non-Uniformly Rotating Self-Gravitating, Finite, Gaseous Disks**
- 14:15 – 15:30 David Polishook, Tel Aviv University  
**Observations of Disrupted Asteroids**

### A4: Low Dimensional and Nanosystems I

Chair: Avi Schiller, Hebrew University

Place: Eng. School, Room 053

- 14:00 – 14:25 Samuel Moukouri, The Hebrew University  
**A density-matrix renormalization group study of coupled Luttinger liquids**
- 14:25 – 14:38 Emanuele G. Dalla Torre, Eugene Demler, Thierry Giamarchi, Ehud Altman, Dept. Condensed Matter Physics, Weizmann Institute of Science  
**Quantum critical states and phase transitions in the presence of non equilibrium noise**
- 14:38 – 14:51 N. Tenen, A. Yu. Kuntsevich, M. Reznikov, V. M. Pudalov, T. M. Klapwijk, Solid state institute, Technion, Haifa, Israel  
**Thermodynamic magnetization of a strongly interacting two-dimensional system**
- 14:51 – 15:04 Liora Bitton, Richard Berkovits, Aviad Frydman, Physics Department, Bar Ilan University  
**Two gate voltage periods in a metallic-nanoparticle based single-electron transistor**
- 15:04 – 15:17 **IPS Prize Winner: Moshe Goldstein**, Richard Berkovits, Yuval Gefen, The Minerva Center, Department of Physics, Bar-Ilan University  
**Population switching and charge sensing in quantum dots: A case for a quantum phase transition**
- 15:17 – 15:30 Itamar Sela, Department of Physics, Ben Gurion University  
**Quantum decay into a non-flat continuum**

## A5: Soft Matter and Biophysics I

Chair: Rony Granek, Ben Gurion University

Place: Eng. School, Room 271

- 14:00 – 14:30 Michael Elbaum, Dept. of Materials and Interfaces, Weizmann Institute of Science  
**Thermodynamics and the nuclear pore: a pump with no moving parts**
- 14:30 – 14:50 Naama Gal, Daphne Weihs, Faculty of Biomedical Engineering, Technion – Israel Institute of Technology  
**Experimental evidence of strong anomalous diffusion in living cells**
- 14:50 – 15:10 Barak Gur, Oded Farago, Department of Physics, Ben Gurion University  
**Cooperative bidirectional motion of motor proteins**
- 15:10 – 15:30 Gabriel A. Frank, Amnon Horovitz, Gilad Haran, Department of Chemical Physics, Weizmann Institute of Science  
**Out-of-equilibrium conformational cycling of GroEL under saturating ATP concentrations**

## A6: Statistical and Nonlinear Physics I

Chair: Ron Lifshitz, Tel Aviv University

Place: Eng. School, Room 002

- 14:00 – 14:30 Eli Sloutskin, Peter J. Lu, David A. Weitz, Department of Physics, Bar Ilan University  
**Direct imaging of crystal nucleation in hard spheres**
- 14:30 – 14:45 Eyal Kening, Boris A. Malomed, M. C. Cross, Ron Lifshitz, Raymond and Beverly Sackler School of Physics and Astronomy, Tel Aviv University  
**Intrinsic localized modes in parametrically driven arrays of nonlinear resonators**
- 14:45 – 15:00 Nickolay Korabel, Eli Barkai, Physics Department, Bar Ilan University  
**Pesin-Type Identity for Intermittent Dynamics with a Zero Lyapunov Exponent**
- 15:00 – 15:15 Stas Burov, Physics Department, Bar Ilan University  
**Confined anomalous diffusion**
- 15:15 – 15:30 Baruch Barzel, The Racah Institute of Physics, The Hebrew University  
**Is it really a small world – network connectivity revisited**

## A7: Quantum Information

Chair: Nadav Katz, The Hebrew University

Place: Eng. School, Room 106

- 14:00 – 14:12 Anna Keselman, Yinnon Glickman, Nitzan Akerman, Shlomi Kotler, Yehonatan Dallal, Roei Ozeri, Weizmann Institute of Science  
**Narrow linewidth diode laser for ion qubit manipulations**
- 14:12 – 14:24 Assaf Shaham, Hagai Eisenberg, Racah Institute of Physics, The Hebrew university of Jerusaelm  
**Realizing a controllable noise in photonic quantum information channels**
- 14:24 – 14:36 Ido Almog, Yoav Sagi, Nir Davidson, Weizmann Institute of Science  
**Suppression of Decoherence Induced by Collisions in an Ultra-Cold Ensemble of Atoms**
- 14:36 – 14:48 Yoni Shalibo, Ya'ara Rofe, David Shwa, Felix Zeides, Nadav Katz, Racah Institute of Physics, The Hebrew University of Jerusalem  
**Coupling of microscopic two-level defects to a superconducting Josephson phase-circuit**
- 14:48 – 15:00 Oren Suchoi, Baleegh Abdo, Eran Segev, Oleg Shtempluck, Miles Blencowe, Eyal Buks, Technion, Israel  
**Intermode Dephasing in a Superconducting Stripline Resonator**
- 15:00 – 15:12 Avi Pe'er, Physics Department and BINA center for Nanotechnology, Bar Ilan University  
**An Ultrafast detector for squeezing**
- 15:12 – 15:24 Asaf Eilam, Arlene Wilson Gordon, Chemistry Department Bar-Ilan University  
**Spatial quantum memory based on Coherent Population Oscillation**
- 15:24 – 15:36 Noam Erez, Tel Aviv University  
**Heating & cooling by measurement: Zeno meets Lindblad**

## A8: Optics

Chair: Oren Cohen, Technion

Place: Eng. School, Room 042

- 14:00 – 14:15      **IPS Prize Winner: O. Firstenberg**, P. London, M. Shuker, A. Ron, N. Davidson, Department of Physics, Technion-Israel Institute of Technology  
**Elimination, reversal and directional bias of optical diffraction**
- 14:15 – 14:30      Yuri Gorodetski, Nir Shitrit, Itay Bretner, Vladimir Kleiner, Erez Hasman, Micro and Nanooptics Laboratory, Faculty of mechanical engineering and Russell Berrie Nanotechnology Institute, Technion – Israel Institute of Technology  
**Observation of optical spin symmetry breaking in nanoapertures**
- 14:30 – 14:45      Ori Katz, Jonathan Levitt, Eran Grinvald, Yaron Silberberg, Department of Physics of Complex Systems, The Weizmann Institute of Science  
**"Shaper-less" Single-Pulse CARS Using a Resonant Photonic Crystal Filter**
- 14:45 – 15:00      Moti Fridman, Micha Nixon, Asher A. Friesem, Nir Davidson, Weizmann institute of science, Dept of complex systems  
**Spectral behavior of phase locked multimode fiber lasers**
- 15:00 – 15:15      Alon Bahabad, Margaret M. Murnane, Henry C. Kapteyn, Department of Physics and JILA, University of Colorado at Boulder and NIST, Boulder, Colorado, USA  
**Spatiotemporal Nonlinear Optical Diffraction**
- 15:15 – 15:30      Ofer Kfir, Maxim Kozlov, Oren Cohen, Technion  
**Frequency Up-Conversion of Attosecond Pulses**

## A9: Material Physics

Chair: Ehoud Pazy, NRCN

Place: Eng. School, Room 249

- 14:00 – 14:20 Guy Makov, Materials Department, Ben Gurion University  
**Ab Initio based multiscale modeling for materials**
- 14:20 – 14:34 Eugeny Pechenik, Guy Makov, Itzhak Kelson, Raymond and Beverley Sackler Faculty of Exact Sciences, School of Physics and Astronomy, Tel Aviv University  
**Embedded-atom type many-body models of elemental materials**
- 14:34 – 14:48 Eyal Yoskovitz, Uri Banin, Institute of Chemistry and the Center for Nanoscience and Nanotechnology, The Hebrew University  
**Nanoscale Near Field Imaging of Excitons in Single Heterostructure Nanorods**
- 14:48 – 15:02 O. Noked, E. Sterer, R. Shuker, Y. Greenberg, S. Yakovlev, Ben Gurion University of the Negev  
**Amorphization of  $\text{La}_{1/3}\text{NbO}_3$  under high pressure**
- 15:02 – 15:16 O. Chen, A. Ocherashvily, S. May-Tal Beck, I. Israelashvily, A. Beck, H. Etedgui, NRCN, Beer Sheva  
**Positron Annihilation Lifetime Spectroscopy**
- 15:16 – 15:30 Aron Lewis, Rimma Dekhter, Hesham Taha, Galina Fish, David Lewis, Nanonics Imaging Ltd.  
**Tip Enhanced Raman Scattering of Strained Silicon with Single and Multiple Probe Scanned Probe Microscopes**

## B1: High Energy Physics II

Chair: Eilam Gross (WIS)

Place: Eng. School, Room 243

- 16:00 – 16:18 Enrique Kajomovitz, Sagi Ben-Ami, Yoram Rozen, Physics Faculty, Technion  
**Measuring  $\text{BR}(t \rightarrow \tau)/\text{BR}(t \rightarrow \mu)$  in ATLAS**
- 16:18 – 16:36 Yaniv Tenenbaum Katan, Shlomit Tarem, Shikma Bressler, Sofia Vallecorsa, Technion Physics Department  
**Identification of Sleptons in ATLAS**
- 16:36 – 16:54 Daniel Grossman, Yosef Nir, Ofer Vitells, Eilam Gross, Weizmann Institute of Science  
**Testing Minimal Flavor Violation with extra Vector-like Leptons at the LHC**
- 16:54 – 17:12 Oram Gedalia, Lorenzo Mannelli, Gilad Perez, Department of Particle Physics and Astrophysics, Weizmann Institute of Science  
**Covariant Description of Flavor Violation at the LHC**
- 17:12 – 17:30 Ofir Gabizon, Department of Particle Physics, Weizmann Institute of Science  
**Search For SuperSymmetry at the LHC in a Higgs+Photon+MissingEnergy channel**



## B2: Superconductivity and Magnetism II

Chair: Lior Klein, Bar Ilan University

Place: Eng. School, Room 022

- 16:00 – 16:15 M. Ben Shalom, D. Rakhmilevitch, M. Sachs, Tel Aviv University  
**Tuning spin-orbit interaction and superconductivity in SrTiO<sub>3</sub>/LaAlO<sub>3</sub> interfaces**
- 16:15 – 16:30 Snir Seri, Lior Klein, Department of Physics, Nano-magnetism Research Center, Institute of Nanotechnology and Advanced Materials, Bar-Ilan University  
**Antisymmetric magnetoresistance of the SrTiO<sub>3</sub>/LaAlO<sub>3</sub> interface**
- 16:30 – 16:45 D. I. Golosov, Physics Department, Bar Ilan University  
**A new correlated model of colossal magnetoresistive manganese oxides**
- 16:45 – 17:00 Lital Marcipar, Amit Keren, Physics Department, Technion  
**Muon-Spin spectroscopy of the organometallic spin 1/2 kagomé-lattice compound Cu(1,3-benzenedicarboxylate)**
- 17:00 – 17:15 Eran Amit, Amit Keren, Technion  
**The origin of critical doping variations in Cuprates**
- 17:15 – 17:30 I. Diamant, S.Hacohen-Gourgy, Y.Dagan, Raymond and Beverly Sackler School of Physics and Astronomy, Tel-Aviv University  
**Doping dependent bosonic modes in the high T<sub>c</sub> superconductor Pr<sub>2-x</sub>Ce<sub>x</sub>CuO<sub>4-δ</sub> from point contact spectroscopy**

## B3: Astrophysics II

Chair:

Place: Eng. School, Room 244

- 16:00 – 16:30 Yehuda Hoffman, Racah Inst. of Physics, Hebrew University, Jerusalem  
**Constraint local universe simulations**
- 16:30 – 16:45 T. Goerdt, Racah Inst. of Physics, Hebrew University, Jerusalem  
**Gravity driven Lyman-Alpha blobs from cold streams into galaxies**
- 16:45 – 17:00 Anastasia Fialkov, Tel Aviv university  
**Cosmological imprints of pre-inflationary particles**
- 17:00 – 17:15 Marcello Cacciato, Racah Inst. of Physics, Hebrew University, Jerusalem  
**Galaxy-Dark Matter Connection: from Astrophysics to Cosmology**
- 17:15 – 17:30 Eva Sagi, Racah Inst. of Physics, Hebrew University, Jerusalem  
**Gravitational waves in the tensor-vector-scalar theory of gravity**

## B4: Low dimensional and nanosystems II

Chair: Motti Heiblum, Weismann Institute

Place: Eng. School, Room 053

- 16:00 – 16:15      **IPS Prize Winner: Dov Steiner**, Doron Azulay, Assaf Aharoni, Asaf Salant, Uri Banin, Oded Millo, Racah Institute of Physics, the Hebrew University  
**Scanning tunneling spectroscopy and photoconductivity of hybrid semiconductor nanocrystals systems**
- 16:15 – 16:30      Dana Toker-Nadler, Isaac Balberg, Oded Millo, Racah Inst. of Physics, Hebrew University, Jerusalem  
**A local charging effect induced by Atomic Force Microscopy measurements on CdSe nano-crystal solids**
- 16:30 – 16:45      Edouard B. Sonin, Hebrew University, Jerusalem  
**Edge spin accumulation: spin Hall effect without bulk spin current**
- 16:45 – 17:00      Vadim Puller, Yigal Meir, Department of Physics, Ben Gurion University of the Negev  
**Controlled Breaking of Phase Symmetry in a "Which-Path?" Interferometer**
- 17:00 – 17:15      Eitan Rothstein, Amnon Aharony, Ora Entin-Wohlman, Ben Gurion University  
**The noise spectra of a double quantum dot**
- 17:15 – 17:30      O. Moshe, D. H. Rich, B. Damilano, J. Massies, Department of Physics, The Ilse Katz Institute for Nanoscience and Nanotechnology, Ben-Gurion University of the Negev  
**Carrier filling, excited states, and polarized emission from GaN/AlN Quantum Dots subject to external stresses**

## B5: Soft Matter and Biophysics II

Chair: Adi Vaknin, The Hebrew University

Place: Eng. School, Room 271

- 16:00 – 16:30      David Biron, Department of Physics, University of Chicago, USA  
**"So, do worms sleep?" and other questions that may have never crossed your mind**
- 16:30 – 16:50      Inbal Hecht, Wouter-Jan Rappel, Herbert Levine, Center for Theoretical Biological Physics and Department of Physics, University of California, USA  
**Determining the scale of the Bicoid morphogen gradient**
- 16:50 – 17:10      Matan Dishon, Ohad Zohar, Uri Sivan, Faculty of Physics, Technion - Israel Institute of Technology  
**Ion Specific Interactions in Aqueous Solution**
- 17:10 – 17:30      Oded Agam, Haim Diamant, The Hebrew University  
**Localized Rayleigh instability in evaporation fronts**

## B6: Statistical and Nonlinear Physics II

Chair: Doron Cohen, Ben Gurion University

Place: Eng. School, Room 002

- 16:00 – 16:15 Ariel Amir, Yuval Oreg, Yoseph Imry, Weizmann Institute of Science  
**Exponential distance matrices, anomalous diffusion and slow relaxations**
- 16:15 – 16:30 Itzhack Dana, Minerva Center and Department of Physics, Bar-Ilan University  
**Statistical Approach to Quantum Chaotic Ratchets**
- 16:30 – 16:45 O. Firstenberg, R. Pugatch, P. London, M. Shuker, A. Ron, N. Davidson, Department of Physics, Technion-Israel Institute of Technology  
**Self-similar Modes of Complex Diffusion**
- 16:45 – 17:00 Rami Pugatch, Dipankar Bhattacharyya, Nir Davidson, Department of Physics of Complex Systems, Weizmann Institute of Science, Rehovot, Israel  
**Observation of imaginary time Anderson localization - the drunkards and the policemen**
- 17:00 – 17:15 Asher Yahalom, Jacob Levitan, Meir Lewkowicz, Larry Horwitz, Ariel University Center  
**Lyapunov vs. Geometrical Stability Analysis of the Kepler and the Restricted Three Body Problem**
- 17:15 – 17:30 Oded Yaakobi, Lazar Friedland, Racah Institute of Physics, The Hebrew University, Jerusalem  
**Phase space analysis of nonlinear coupled waves systems**

## B7: Cold Atoms

Chair: **Lev Khaykovich**, Bar Ilan University

Place: Eng. School, Room 042

- 16:00 – 16:13 Nitzan Akerman, Shlomi Kotler, Yinnon Glickman, Yehonatan Dallal, Anna Keselman, Roe Ozeri, Physics of Complex Systems, Weizmann Institute of Science  
**A Single trapped ion in an anharmonic potential**
- 16:13 – 16:26 Gareth Conduit, Ben Gurion University  
**A repulsive atomic gas in a harmonic trap on the border of itinerant ferromagnetism**
- 16:26 – 16:39 Noam Gross, Zav Shotan, Servaas Kokkelmans, Lev Khaykovich, Department of Physics, Bar-Ilan University  
**Observation of Universality in Ultracold  $7\text{Li}$  Three-Body Recombination**
- 16:39 – 16:52 Sebastian D. Huber, Ehud Altman, Department of Condensed Matter Physics, The Weizmann Institute of Science, Rehovot  
**The inverted kagome lattice: frustrated bosons without superexchange**
- 16:52 – 17:05 Yonathan Japha, Yehuda Band, Department of Physics, Ben-Gurion University, Beer-Sheva  
**Spatial evolution and phase dynamics of two-mode matter-waves**
- 17:05 – 17:18 Yoav Sagi, Ido Almog, Rami Pugatch, Nir Davidson, Department of Physics of Complex Systems, Weizmann Institute of Science, Rehovot  
**Collisional narrowing with optically trapped atoms**
- 17:18 – 17:31 Ronen Vosk, Ehud Altman, Weizmann Institute of Science  
**Bosons in disordered 1d traps: a new paradigm for the superfluid-insulator transition?**

## B8: Plasma Physics

Chair: **Amnon Fruchtman**, Holon Institute of Technology

Place: Eng. School, Room 249

- 16:00 – 16:13      Amit S. Kesar, Soreq NRC  
**Three-dimensional calculation of Smith-Purcell radiation**
- 16:13 – 16:38      Avi Gover, Ariel Nause, Egor Dyunin, Tel Aviv University  
**Electron-beam noise and spontaneous emission suppression and the fundamental coherence limits of free electron radiators**
- 16:38 – 16:51      Yosef Pinhasi, Yuri Lurie, Ariel University Center of Samaria  
**Collective effects in pulsed beam free-electron lasers operating in the Tera-Hertz regime**
- 16:51 – 17:04      Dimitry Mikitchuk, Severino Tessarin, Ramy Doron, Evgeny Stambulchik, Eyal Kroupp, Yitzhak Maron, Weizmann Institute of Science, Rehovot  
**Implementation of a new spectroscopic approach to measure magnetic fields in dense plasmas**
- 17:04 – 17:17      H. Strauss, HRS Fusion  
**Wall Force produced during an ITER disruption**
- 17:17 – 17:30      Asher Yahalom, Ariel university Center of Samaria  
**Aharonov - Bohm Effects in Topological Magnetohydrodynamics**

## B9: Educational Physics

Chair: **Michael Sabin**, Weizmann Institute of Science

Place: Eng. School, Room 239

- 16:00 – 16:30      יגאל גלילי, האוניברסיטה העברית בירושלים  
על התפקיד של האוניברסיטאות כלפי הוראת הפיזיקה בבתי הספר
- 16:30 – 17:00      אלי רז, אורט בראודה  
הוראת קורסי היסוד בפיזיקה במוסדות להשכלה גבוהה – לאן
- 17:00 – 17:30      מיכאל סבין, מכון ויצמן למדע  
הוראת קורסי היסוד בפיזיקה במוסדות להשכלה גבוהה

## Posters

Categories:

A – High Energy, Astrophysics and Plasma Physics

B – Condensed Matter, Material Physics and Quantum Information

C – Optics, Cold Atoms and Quantum Information

D – Biophysics and Statistical Physics

Poster #	Author	Title
00-A	Amit Givon, Dan Gorbonos, Merav Stern <b>Racah Institute of Physics, The Hebrew University</b>	Fundamental Strings and Higher Derivative Corrections to d-Dimensional Black Holes
01-A	Alexander Gersten, Amnon Moalem <b>Ben Gurion University</b>	The Maxwell's equations and the equivalent first quantized photon equations from a scalar Lagrangian formalism.
02-A	Lawrence Horwitz, Gershon Avi, Marcelo Schiffer <b>School of Physics and Astronomy, Tel Aviv</b>	Hamiltonian Map to Conformal Modification of Spacetime Metric: Kaluza-Klein and TeVeS
03-A	Alon Eliran, Avraham Gover, Yosef Pinhasi, Asher Yahalom, Yuri Lurie, Gad Pinhasi <b>Tel-Aviv University</b>	Statistical Study of Undulator Radiated Power by a Classical Detection System in the Mm-Wave Regime
04-A	Pavel Khain, Lazar Friedland <b>The Hebrew University of Jerusalem</b>	Averaged variational principle for autoresonant Bernstein-Greene-Kruskal (BGK) modes
05-A	Ido Barth, Lazar Friedland, Eli Sarid, Arkadi Shagalov <b>Racah Institute of Physics, Hebrew University, Jerusalem</b>	Autoresonant Transition in the Presence of Noise and Self-Fields
06-A	Ariel Nause, Egor Dyunin, Avraham Gover <b>Tel Aviv University</b>	electron beam shot noise suppression by collective coulomb interaction: 3d analysis
07-A	Yuri Lurie, Yosef Pinhasi <b>Ariel University Center of Samaria</b>	Modal description of longitudinal space-charge fields in pulsed-driven free-electron devices
08-B	Eidelstein Eitan <b>Racah Institute of Physics, The Hebrew University, Jerusalem</b>	On the Transition from a Large to a Small Fermi Surface in the Kondo-Heisenberg Chain
09-B	Revital Kopeliainsky, Avner Shaulov, Yosef Yeshurun <b>Physics Department, Bar-Ilan University</b>	Possibility of vortex structural phase transition in the superconducting pnictide BaFe <sub>1.8</sub> Co <sub>0.2</sub> As <sub>2</sub>
10-B	Maayan Moshe, V.G. Kogan, R.G. Mints <b>The Raymond and Beverly Sackle</b>	Josephson junctions in thin films

11-B	M.I. Tsindlekht, V.M. Genkin, G.I. Leviev, Y. Schluskel, I. Felner, V.B. Filippov, N. Yu. Shitsevalova <b>The Racah Institute of Physics, The Hebrew University, Jerusalem</b>	AC response of the surface superconducting states of YB6 and ZrB12 single crystals in a swept magnetic field
12-B	Roi Levy, Yigal Meir <b>Physics Department, Ben Gurion University</b>	Quantum Hall Insulator
13-B	Eldad Peretz, David Barlam, Yishay Manassen, Roni Z. Shneck <b>Physics Department, Ben Gurion University</b>	Elastic mechanism of Self ordering of QDS
14-B	Noa Kurzweil, Eugene Kogan, Aviad Frydman <b>Physics Department, Bar Ilan University</b>	Itinerant Ferromagnetism in the electronic localization limit
15-B	S. Levy, I. Shlimak, A. Chelly, Zeev Zalevsky, D.H. Dressler, T. Lu <b>Department of Physics &amp; Bar-Ilan Institute of Nanotechnology and Advanced Materials, Bar-Ilan University</b>	Influence of a strong neutron irradiation on the size and spatial distribution of Ge nanocrystals embedded in SiO2 matrix
16-B	Yevgeni Estrin, Daniel H. Rich, Ofer Moshe, Sayan Bhattacharyya, Leonid A. Solovyov, A. Gedanken <b>Department of Physics, The Ilse Katz Institute for Nanoscience and Nanotechnology, Ben-Gurion University of the Negev</b>	Time-resolved cathodoluminescence study of ZnxCd1-xSe/C Core/Shell Nanocrystals with phase-separation
17-B	Shlomit Weissman, David A. Kessler <b>Physics Department, Bar Ilan University</b>	Optimal Dispersal Rates in Meta-Population Models
18-B	Baruch Rosenstein, Meir Lewkowicz <b>NCTU, Hsinchu, Taiwan</b>	Dynamics of Particle-Hole Pair Creation in Graphene
19-B	Moshe Einat, Meir Grajower <b>Department of Electrical and Electronic Engineering, Ariel University Center of Samaria</b>	Thermal inkjet heaters experimental parameters and micro-boiling limits
20-B	Eli Kraiser, Guy Makov <b>Raymond and Beverley Sackler Faculty of Exact Sciences, School of Physics and Astronomy, Tel Aviv University</b>	Density-functional calculations for atomic systems. The treatment of non-pure-state $v$ -representable densities.
21-B	M.Klebanov, V. Lyubin, A. Arsh, M. Manevich, J. Varshal, N.P. Eisenberg, R. Dror, B. Sfez, D. Fuks <b>Department of Physics, Ben-Gurion University</b>	NEW CHALCOGENIDE GLASSY PHOTO- AND ELECTRON BEAM RESISTS: PHYSICAL PROPERTIES AND APPLICATION
22-B	M. Manevich, J. Varshal, N.P. Eisenberg, V. Lyubin, M. Klebanov, Yu. Reznikov <b>Department of Electro-optics, Lev Institute-JCT</b>	Investigation of physical properties and micro-optical application of sulfide-selenide thin films
23-B	R. Englman <b>Soreq NRC</b>	Possible Breakdown of the Adiabatic Theorem in an Aharonov-Bohm Set Up
24-B	Shelomo I. Ben-Abraham <b>Department of Physics, Ben-Gurion University</b>	Quasiregular heterostuctures and double-sided substitution sequences

25-B	Avi Malki, M. Zilka, M.A. Moinester, E. Piasetzky, E. Neeman, H. Nasser, V. Steiner, N. Lavi <b>Nuclear Physics Department, Tel Aviv University</b>	Measurement of the radon diffusion length in thin membranes
26-B	Ze'ev Shpilman, Irina Gouzman, Eitan Grossman, L. Shen, Timothy K. Minton, Alon Hoffman <b>Space Environment Section, Soreq NRC</b>	Interaction of Polycrystalline CVD Diamond Thin Films with Atomic Oxygen
27-B	Iulian Rusu <b>Technical University Gheorghe Asachi, Department of Chemical Engineering, Bd.D. Mangeron 71, Iași, Romania</b>	considerations on the stability and durability of historical materials
28-C	Aviram Gur, Ran Aharoni, Zeev Zalevsky, Vladimir G. Kutchoukov, Vicente Mico, Javier Garcia, Yuval Garini <b>School of Engineering and Nanotechnology Inst., Bar Ilan University</b>	Fully Lensless Microscopy based on Sub-Wavelength Non-Periodic Holes Array Plate
29-C	Inna Nusinsky, Amos A. Hardy <b>Department of Electrical Engineering - Physical Electronics, Tel Aviv University</b>	Analytical calculations of complex-shaped two-dimensional photonic crystals
30-C	Asher Yahalom, Yosef Pinhasi, Elhanan Shifman, Sergey Petnev <b>Ariel University Center of Samaria</b>	Transmission through Multiple Layers in UWB Communications
31-C	Herzl Aharoni, Monuko du Plessis, Lukas W. Snyman <b>Department of Electrical and Computer Engineering, Ben-Gurion University of the Negev</b>	Proposed Model for the Effect of Microplasmas Properties on the Light Emission Spectrum from Single Crystal Reverse Biased Silicon PN Junctions
32-C	Lukas W. Snyman, K. Ogudo, G. Udahemuka, Herzal Aharoni <b>Tshwane University of Technology, TUT, South Africa</b>	simulation of optical propagation mechanisms in cmos integrated circuitry - basis for development of smart Si led (450nm-750nm) based on-chip micro-mechanical optical sensors (cmos-moems)
33-C	Yosef Pinhasi, Asher Yahalom, Gad A. Pinhasi <b>Ariel University Center of Samaria</b>	Propagation Analysis of Ultra-Short Pulses in Resonant Dielectric Media
34-C	Yossi Ben-Aderet, Er'el Granot, Shmuel Strenklar, Tzachi Tal <b>Ariel University Center of Samaria</b>	Optical Impulse Response Reconstruction of a Scattering Medium with the Differential Multiply Subtractive Kramers-Kronig Method
35-C	Shmuel Sternklar, Er'el Granot, Eyal Sarid, Max Veret <b>Ariel University Center of Samaria</b>	Mutually Modulated Cross-Gain Modulation for RF Optical Processing and Slow Light
36-C	Ido Azuri, Wilson-Gordon Arlene, Harry Friedmann <b>Chemistry Department, Bar Ilan University</b>	Phase-dependent group velocity
37-C	Shahar Hirshfeld, Steve Lipson <b>Physics Dept., Technion</b>	Measuring Directly the Orbital Angular Momentum of Light.



38-C	Ran Aharoni, Moshe Sinvani, Moshe Azoulay, Avraham Chelly, Zeev Zalevsky <b>School of Engineering, Bar Ilan University</b>	All-Optical Fiber-Integrated Silicon based Modulator
39-C	A. Sharypov, A. Eilam, A.D. Wilson-Gordon, H. Friedmann <b>Bar-Ilan University</b>	Phase-dependent propagation in a two-level system with intermediate states
40-C	E. Flaxer, M. Klebanov, V. Lyubin, D. Fuks <b>AFEKA - Tel-Aviv Academic College of Engineering</b>	Photodarkening of some amorphous chalcogenide films under $\mu$ s light pulses
41-C	Reuben Shuker, Alon Har-Tal, Gennady A. Koganov <b>Physics Department, Ben Gurion University of the Negev</b>	Counterintuitive gain without inversion enhancement in pulsed fields sequence
42-C	Jonatan Coslovsky <b>Ben-Gurion University</b>	Reducing decoherence on atom chips by material engineering
43-C	Ramon Szmuk <b>Ben-Gurion University</b>	Nanowire atomchip traps for sub-micron atom-surface distances
44-C	Ido Kanter, Evi Kopelowitz, Wolfgang Kinzel <b>Physics Department, Bar-Ilan University</b>	Public Channel Cryptography: Chaos Synchronization and Hilbert's Tenth Problem
45-C	Eran Segev, Oren Suchoi, Oleg Shtempluck, Eyal Buks <b>Quantum Engineering Lab., Department of Electrical Engineering, Technion</b>	Self-Oscillations in a superconducting stripline Resonator integrated with a DC-Squid
46-D	Dan Klarman, David Andelman <b>Tel-Aviv University</b>	A Simple Model for Contact Angle Saturation in Electrowetting Systems
47-D	Daria Prilutsky, Boris Rogachev, Marina Vorobiov, Leslie Lobel, Mark Last, Robert S. Marks <b>Department of Virology, Faculty of Health Science, Ben-Gurion University of the Negev</b>	Fast Classification of Pathological Processes in Peritoneal Dialysis Patients Based on Blood Samples
48-D	Naomi Oppenheimer, Haim Diamant <b>Tel-Aviv University</b>	Correlated diffusion of membrane proteins
49-D	Dan Ben-Yaakov, David Andelman, Daniel Harries, Rudi Podgornik <b>Raymond and Beverly Sackler School of Physics and Astronomy, Tel Aviv University</b>	Ions in mixed dielectric solvents: density profiles and osmotic pressure between charged interfaces
50-D	Gregory Samelsohn <b>Holon Institute of Technology</b>	Diffusing wave tomography of time-varying random media
51-D	Roie Shlomovitz, Nir Gov <b>Weizmann institute of science</b>	Membrane-mediated interactions drive the condensation and coalescence of FtsZ rings
52-D	A.L. Grinberg, A. Herman, Y. Tovbin, C. Brahmi, U. Nevo <b>Tel Aviv University</b>	Monitoring cryotherapy with interventional MRI: Studies of umbilical cord
53-D	Kobi Barkan, Ron Lifshitz, Haim Diamant <b>School of Physics &amp; Astronomy, Tel Aviv University</b>	Stability of soft quasicrystals composed of isotropic particles

54-D	Yulia Sokolov, Yael Roichman, Haim Diamant <b>Tel Aviv University</b>	Pairing effect of colloidal particles driven in optical vortices
55-D	Noa Geva, Yaron Hakuk, Orit Shefi <b>School of Engineering, Bio-Engineering, Bar Ilan University</b>	Neural engineering using novel biolistic delivery of nanoparticles into living tissue
56-D	Moshe Lindner, Guy Nir, Yuval Garini <b>Physics Department &amp; Nanotechnology Institute, Bar Ilan University</b>	Measuring the 3D-distribution of DNA conformation using Tethered Particle Motion (TPM)
57-D	Yacov Kantor, Mehran Kardar <b>Tel Aviv University</b>	Statistical Mechanics of Elongated Hard Particles in One Dimension
58-D	Asher Yahalom <b>Ariel University Center of Samaria</b>	Simplified Variational Principles for Non-Stationary Topological Fluid Dynamics
59-D	Joel Ratsaby <b>Electrical and Electronics Engineering Department, Ariel University Center of Samaria</b>	randomness properties of statistical prediction
60-D	Gali Dekel, Oleg Farberovich, Victor Fleurov, Avy Soffer <b>Tel Aviv University</b>	Non linear dynamics of Macroscopic tunneling - from point like to elongated trap.
61-D	Lior Turgeman, Shai Carmi, Eli Barkai <b>Department of Physics, Bar-Ilan University</b>	A Fractional Schrodinger Equation for non-Brownian Functionals
62-D	Yosef E. Maruvka, David A. Kessler, Nadav M. Shnerb <b>Department of Physics, Bar Ilan University</b>	The Neutral Theory of Everything
63-D	Lior Turgeman, Shai Carmi, Eli Barkai <b>Bar - Ilan university</b>	Fractional Feynmann-Kac equation for non-brownian functionals
64-D	Micha Nixon, Moti Fridman, Eitan Ronen, Asher Friesem, Nir Davidson <b>Weizmann Institute of Science</b>	Nonlinear dynamics of weakly coupled lasers
65-D	Moti Ben-Harush, Itzhack Dana <b>Minerva Center and Department of Physics, Bar-Ilan University</b>	Kicked Hall Systems: Generic Suppression of Weak Chaos on a Universal Stochastic Web

## Presenting authors

P = Plenary, A1-B9 – Parallel, R=Review, 00-A – 67-D = Poster

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Aharoni Assaf (HU)	B4
Aharoni Herzl (BGU)	31-C, 32-C
Aharoni Ran (BIU)	28-C, 38-C
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Aharony Ofer (WIS)	A1
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Dagan Y. (TAU)	B2
Dalla Torre G. Emanuele (WIS)	A4
Dallal Yehonatan (WIS)	A7
Damilano B. (CNRS, France)	B4
Dana Itzhack (BIU)	B6, 65-D
Davidson Nir (WIS)	A7, A8, B6, B7, 64-D
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