

Adams Seminar

2022

סמינר אדמס תשפ"ב

Guest Lecturer

**Prof. Noam Sobel**

Director, Azrieli National Center for Human Brain Imaging and Research  
Weizmann Institute of Science

Editor

Deborah Greniman

Photographers

Reouven Ben Haim, Vera Etzion, Michal Fattal,  
Udi Katzman, Sasson Tiram

Graphic Design

Navi Kaduri

**The Israel Academy of Sciences and Humanities**

P.O.Box 4040 Jerusalem 9104001

Tel 972-2-5676207

E-mail [batsheva@academy.ac.il](mailto:batsheva@academy.ac.il)

[www.adams.academy.ac.il](http://www.adams.academy.ac.il)

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האקדמיה הלאומית הישראלית למדעים  
المجمع الوطني الإسرائيلي للعلوم والآداب  
THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES



# ADAMS

## Fellowships מלגות אדמס

The Adams Fellowships is a joint program of the late Mr. Marcel Adams of Canada and the Israel Academy of Sciences and Humanities.

Chartered by law in 1961, the Israel Academy of Sciences and Humanities acts as a national focal point for Israeli scholarship in both the natural sciences and the humanities and social sciences. The Academy consists of 143 of Israel's most distinguished scientists and scholars, who, with the help of the Academy's staff and committees, monitor and promote Israeli intellectual excellence, advise the government on scientific planning, fund and publish research of lasting merit, and maintain active contact with the broader international scientific and scholarly community.

For more information, please send an e-mail to [batsheva@academy.ac.il](mailto:batsheva@academy.ac.il) or call 972-2-5676207. Visit our website: [adams.academy.ac.il](http://adams.academy.ac.il)





## Marcel Adams

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Hebrew-speaking philanthropist Marcel Adams, who escaped from a forced-labor camp in Romania in 1944, fought in Israel’s War of Independence and made his fortune in Montreal, has endowed the Adams Fellowship Program to support Israel’s brightest doctoral students in the natural and exact sciences each year.

Marcel Adams (Abramovich) was born in Piatra-Neamt, Romania, in 1920. The anti-Semitic regime in Romania during the Holocaust interrupted his studies, triggering a lifelong quest for learning and a zest for the life of the mind. An active member of Hanoar Hazoni in Bucharest, Adams survived forced labor, food shortages and arbitrary harassment by the authorities.

After coming to Israel with the Jewish Agency’s help in 1944, Adams settled in Pardes Hanna and participated in the War of Independence. He moved to Canada in 1951 and worked as a tanner before going into real estate. He eventually developed dozens of properties, mostly in eastern Canada, including Galeries de la Capitale, the largest shopping mall in the province of Quebec. With his late wife Annie, he established Tel Aviv University’s Adams Institute for Business Management Information Systems and endowed the university’s Adams Super Center for Brain Research. Marcel Adams was a Montreal resident, the proud father of four and grandfather of eleven. After a lifetime full of energy and promoting young scientific minds, he passed away shortly after the celebration of his 100<sup>th</sup> birthday.

Adams officially signed an agreement to establish the Adams Fellowships with the Israel Academy of Sciences and Humanities in Jerusalem in May 2005. The fund provides fellowships annually to outstanding Ph.D. students, covering their full tuition and living expenses throughout three to four years of study and including funds for attending scientific conferences abroad. Most recipients are aged 26 to 34.

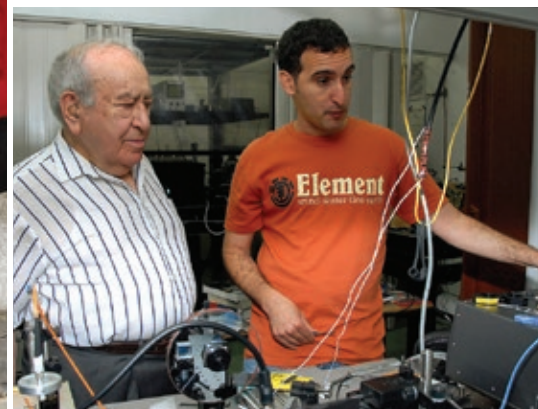
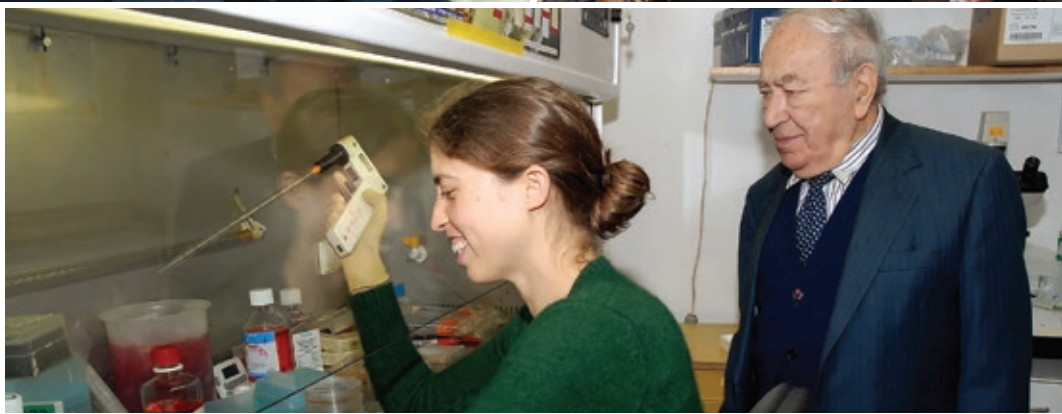
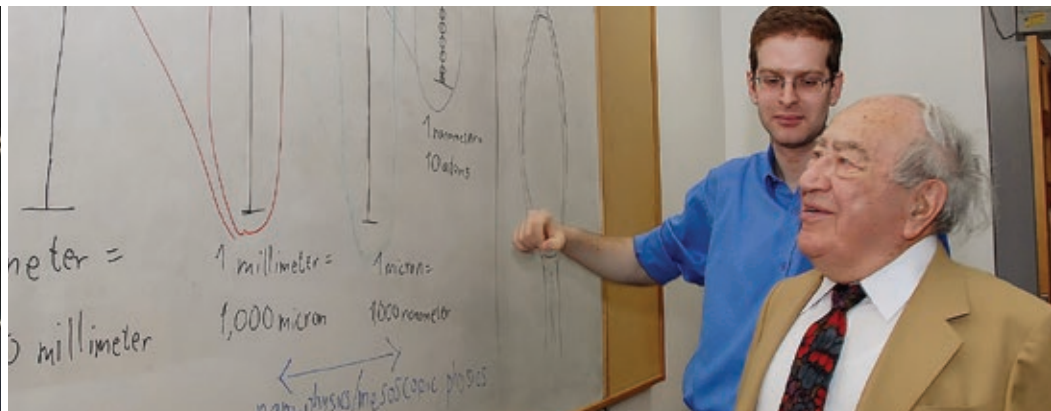
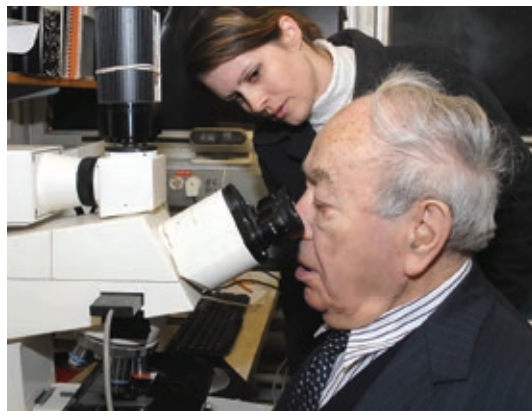
The easy way would have been to hand over a check, but Adams wished to pay back his 1944 debt to the Jewish people, which gave him a new identity and hope for rebuilding from the ashes of Europe. And so he endowed a fellowship program to enable talented young men and women to thrive intellectually, scientifically and technologically, and in turn to carry the flag for the next generation and for future generations.

A professional committee at the Academy reviews applications from doctoral students and chooses the awardees, for study in such fields as organic chemistry, molecular biology, chemistry, mathematics, engineering, physics, genetics, computer science and brain research.

Marcel Adams wished to help the best and brightest academics, those with tremendous potential for growth, who have demonstrated excellence in both quality of mind and personal character.

This year’s newly appointed Adams Fellows represent the Eighteenth Cycle of the Adams Fellowship Program.









**Prof. David Harel**  
President of the Israel Academy

For the past 17 years, The Israel Academy of Sciences and Humanities has been proud to grant the Adams Fellowships to outstanding doctoral students. The program was founded by the late Marcel Adams, who passed away two years ago.

This extremely important endeavor has produced some of Israel’s most brilliant researchers in the natural sciences, and in mathematics, computer science and engineering, and today I would like to warmly greet the new fellows of the 18th cycle – to commence in the academic year 2022-2023.

Over the years, the winners have very successfully joined academic institutions, high-tech and biotech industries and the health system, both in Israel and abroad. In addition, the research of Adams Fellows is published in the world’s most important scientific journals. Each year we are in awe, hearing of the extraordinary candidates who compose the new group of fellows, and this year’s winners are no different. I recommend that we all take note of their names, which are worth remembering for the future.

The Adams stipend amounts to NIS 100,000 a year for each of the 3-4 years of the fellowship. In addition, the Adams Fellowships Program allots fellows up to \$3,000 of travel money for each year of the fellowship, to support active participation in international scientific conferences and workshops, research collaborations or travel to interview for postdoctoral positions abroad. This travel allowance contributes meaningfully to furthering the professional careers of the fellows. I wish to express my deep gratitude to Sylvan Adams and his siblings, Linda, Julian and Leora, who continue in their father’s footsteps, showing total commitment to science and to the young scientists who win the fellowships. Besides its significant financial contribution, the Adams Fellowships Program, through its seminars, conferences, field trips and workshops, provides vital training and motivation for the young scientists’ development, and helps in their efforts to attain the high level of research expected of Adams Fellows.

In addition, I wish to express my deep appreciation to Academy Member Professor Moshe Oren, who chairs the Academy’s Steering and Approval Committee of the Adams Fellowships Program, and to his other committee members, for their extensive work on evaluating the applications and selecting the outstanding young scientists who receive the fellowships each year. Great work!



**Prof. Noam Sobel**  
Director, Azrieli National Center for Human Brain Imaging and Research  
Weizmann Institute of Science

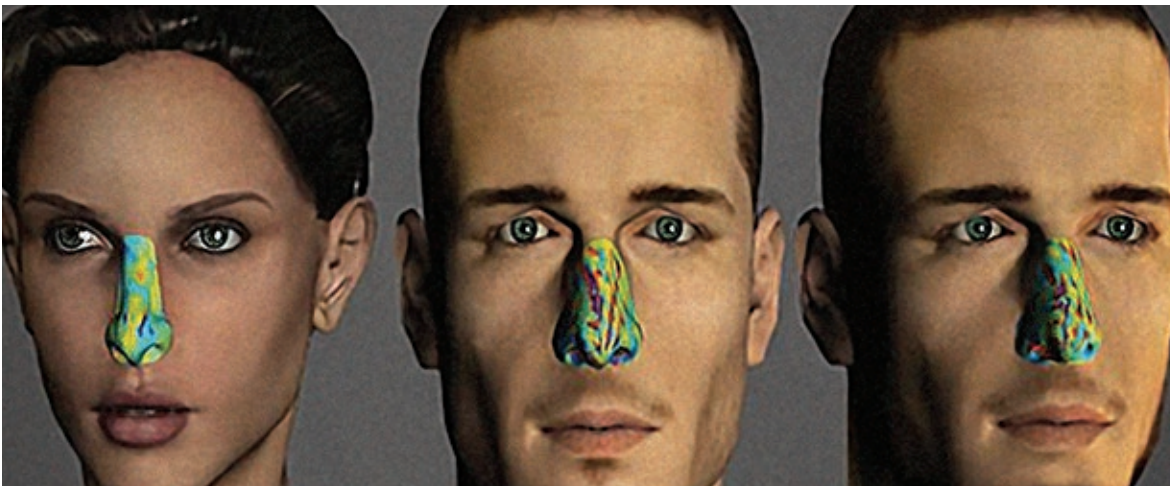
Guest Lecturer on

**BLOOD SWEAT AND TEARS: HUMAN SOCIAL  
CHEMOSIGNALING IN HEALTH AND DISEASE**

After undergraduate studies at Tel Aviv University (1995), Noam Sobel obtained a PhD in Neuroscience at Stanford University (1999). Following a brief postdoctoral fellowship at the Division of Biology at Caltech, in 2001 Noam formed his independent lab at the Institute for Neuroscience at UC Berkeley, where he became a tenured professor of neuroscience.

In 2007 Noam returned to Israel, to form his lab in the Department of Neurobiology (now Brain Sciences) at the Weizmann Institute of Science. Noam was Chair of the Department 2013-2016, and he is the Director of the Azrieli National Centre for Human Brain Imaging and Research, from its inception in 2016.

Noam's lab studies the human brain mechanisms of smell. His group studies how the human nose and brain achieve smell, and how smell influences human behaviour.



Prof. Sobel heads the Weizmann Olfaction Research Group





**Prof. Moshe Oren**

Academy Member; Chair, Adams Fellowships Steering and Approval Committee

Warm greetings to all our Adams Fellows, Adams Alumni, Adams Committee Members, Academy President Prof. David Harel, Academy Vice-President Prof. Margalit Finkelberg, Academy Members, and last but surely not least, dear members of the Adams family, whose continuous generosity has enabled this unique program to promote scientific excellence in Israel for over fifteen years.

Today we will be celebrating again our ability to meet in person and not just as 2D images on a Zoom screen. This will be a renewed opportunity to realize that while you are all outstanding and are a source of pride to us, each of you is unique and distinct in her/his own way. This diversity makes the whole bigger than the sum of its parts, and should be cherished and encouraged. It is particularly important in science, where the ability to think unlike everybody else, challenge dogmas and not accept anything as absolute truth is critical for making a real impact.

This seminar is also an opportunity and obligation to celebrate the memory of the late Marcel Adams, who established the Adams Fellowships Program. Marcel was born in 1920 and lived in Europe through the years of the Second World War and the Holocaust. With the help of the Jewish Agency, he was able to escape from Europe in 1944 and come to Palestine. Although he subsequently moved to Canada, he has always remained loyal to the young state of Israel. Marcel never had a chance to complete his formal education, but this only increased his passion for learning and his admiration for human knowledge. It therefore came naturally to him, as a visionary who cares about the future of this country, to make his own contribution towards advancing knowledge in Israel. And as a person with a track record of making wise investments, he decided to invest in our next generation of scientific leaders.

Like all your predecessors in the Adams Fellows Program, you were also selected to be part of this distinguished program because you were found to be the best of your kind. This endows you not only with distinguished recognition, but also with an obligation to prove that you stand up to the expectations of Marcel Adams - not only by publishing high impact papers in top journals and by being invited to present in prestigious conferences, but also by serving

as role models to younger students and by eventually becoming leaders in Israeli academia and high-technology enterprises. One of the most joyful moments in this program is when an Adamas Fellowship is awarded to a student of a previous Adams Fellowship recipient. This trend is growing in recent years, and I hope that you will also add to the expansion of this parallel “Adams Family” when your time comes.

And until your time arrives, Adams Fellows, to become part of the next generation of scientific leaders in our country, let me wish you a lot of success in your ongoing research and in the next steps of your careers.



Annual ADAMS Seminar 2021





**Top photo: Class of 2020-2021** Back row left to right: Noam Lifshitz, Gil Bashan, Dana Binyamin, Noam Shahar, Dan Liraz, Sylvan Adams, Barry Ginat, Prof. Ruth Arnon, Dalya Baron, Academy Director Galia Finzi. Bottom left to right, Prof. Moshe Oren, Chair of the Adams Fellowships Committee, Academy President Prof. Nili Cohen, Guest Speaker and President of Ben-Gurion University Prof. Daniel Chamovitz. **Bottom photo: Class of 2021-2022** Back row left to right: Yoav Zigdon, Yonatan Hamo, Batsheva Shor, Prof. Moshe Oren, Prof. Ruth Arnon, Noy Nehmad, Efrat Pahima, Noam Harel; Front row left to right: Eyal Weiss, Prof. Nili Cohen, Sylvan Adams, Prof. Daniel Chamovitz







ADAMS Fellowships Steering & Approval Committee



Prof. Moshe Oren  
Chair



Prof. Naama  
Barkai



Prof. Yoav  
Benjamini



Prof. Gedeon  
Dagan



Prof. David  
Gershoni



Prof. Shmaryahu  
Hoz



Prof. Jacob  
Klein



Prof. Elon  
Lindenstrauss



Prof. Micha  
Sharir



Prof. Hermona  
Soreq



Prof. Yeshayahu  
(Ishi) Talmon

Former Committee Members

Prof. Moti Segev, Immediate Past Chair  
Prof. Amiram Grinvald, Past Chair  
Prof. Itamar Willner, Past Chair  
Prof. Chaim Cedar, Past Chair  
Prof. Yoram Groner, Founding Chair

Prof. Yakir Aharonov  
Prof. Noga Alon  
Prof. Moshe Moshe  
Prof. Moty Heiblum  
Prof. Gil Kalai

Prof. David Kazhdan  
Prof. Avraham Nitzan  
Prof. Yosef Shiloh  
Prof. Igal Talmi  
Prof. Jacob Ziv



# ADAMS Fellows 2022–2023

## Nitzan Aframian

PhD student of Prof. Avigdor Eldar,  
Faculty of Life Sciences, Tel Aviv University

**Dissertation topic:** Communication and  
Cooperation in the Bacterio-phage Arms Race



Nitzan grew up in Jerusalem and now lives in Tel Aviv with his partner Aya and their baby boy, Tamuz. After completing five years of military service as an intelligence officer, he commenced undergraduate studies in the research program for outstanding

students in the Life Sciences at Tel Aviv University and continued to MSc and PhD studies under the supervision of Prof. Avigdor Eldar, exploring interactions between bacteria and the viruses that infect them.

Nitzan’s research focuses on cooperation and communication within the ancient and ongoing war between these two simple biological entities. Together with his lab-mates, he discovered that some viruses communicate from their dormant state to control their reactivation. Moving to the bacterial perspective, Nitzan is currently studying the ways in which bacteria defend themselves from viral infection. Intriguingly, bacterial defense strategies seem to involve cooperation and even altruistic self-sacrifice. Through the exploration of this relatively simple model system, he hopes to uncover general principles of communication and cooperation, and the genetics of an evolutionary arms race.

## Amir Burshtein

PhD student of Prof. Moshe Goldstein, School of  
Physics and Astronomy, Tel Aviv University

**Dissertation topic:** Quantum Simulation of  
Many-Body Systems in Superconducting Circuits



Amir, born in 1992, was raised in Herzliya. He completed his BSc in Physics and Electrical Engineering *summa cum laude* at the Technion in 2014. During his BSc studies, he joined the group of Prof. Yonina Eldar to research data reduction techniques in 3D ultrasound imaging and authored an IEEE journal paper. He then went on to serve for six years as a communications research engineer in the IDF Intelligence Corps in the framework of the “Psagot” academic reserve excellence program. Amir received his MSc in Physics *summa cum laude* from Tel Aviv University in 2021 under the supervision of Prof. Moshe Goldstein and is continuing under Prof. Goldstein’s supervision in pursuing his PhD.

Amir’s research focuses on quantum simulators of many-body systems. Amir develops theoretical methods to study simulators implemented in an environment of superconducting circuits, whose high degree of tunability allows one to observe a large variety of effects that are both exotic and fundamental to many-body physics. The tools crafted throughout the course of his research could find uses in many quantum field theoretical contexts, both in condensed matter and in high-energy systems.



Shir Cohen

PhD student of Prof. Idit Keidar,  
Faculty of Computer Science, Technion – Israel  
Institute of Technology  
**Dissertation topic:** Distributed Services  
Under Attack



Shir Cohen, born in 1994 and raised in Ra’anana, now resides in Haifa with her husband, Barak, and her German Shepherd, Zeus. Her early fascination with science and mathematics led her to pursue a BSc in Computer Science at the Technion – Israel Institute of Technology.

Shir developed a special interest in the impact of human behavior on technology. While pursuing her BSc, she was exposed to the field of distributed computing, which immediately enchanted her. In this realm, Shir examines broad aspects of the reliability and security of distributed systems, with a focus on blockchains and other decentralized financial technologies. These systems play a significant role in creating reliable environments where people invest their time and money, making them prone to attacks. By finding efficient and resilient algorithms Shir intends to improve the scalability and reliability of the technology.

Currently, Shir is a direct-track PhD candidate in Computer Science at the Technion, under the supervision of Prof. Idit Keidar. Her research focuses on building theoretical foundations for practical distributed systems. She has received several awards both for academic excellence and for excellence in teaching.

Matan Eilat

PhD student of Prof. Bo’az Klartag,  
Faculty of Mathematics and Computer Science,  
Weizmann Institute of Science  
**Dissertation topic:** Rigidity of Riemannian  
Embeddings of Discrete Metric Spaces

Matan, born in 1990, grew up in Holon. His mathematical curiosity was awakened by his mother, a math teacher, and after completing high school early, he started his undergraduate studies at Tel Aviv University in the framework of the accelerated program in mathematics headed by Prof. Beno Arbel. Shortly after the conclusion of his first academic year, he joined an elite technological unit of the IDF’s Intelligence Corps, where he served for four and a half years.



Matan received his BSc in Mathematics and Computer Science from Tel Aviv University and immediately continued to MSc and PhD studies at the Weizmann Institute of Science, under the supervision of Prof. Bo’az Klartag. His research is in the field of Riemannian geometry, a branch of mathematics that generalizes notions from Euclidean geometry, such as length, angle, surface area and volume. His particular interest lies in deducing geometric conclusions from partial metrical data, such as distances between pairs of points in a discrete subset.

Alongside his research, Matan enjoys lecturing and teaching courses in mathematics. In the coming years, he hopes to combine his love for mathematical research with his passion for teaching.

Omer Granek

PhD student of Prof. Yariv Kafri, Faculty of  
Physics, Technion – Israel Institute of Technology  
**Dissertation topic:** Bodies in an Active Fluid



Omer, born in 1995, lives in Haifa. He graduated from the Technion with a BSc in Mathematics-Physics through the Technion Excellence Program. During his undergraduate studies, he participated in various research projects, ranging from control theory for engineering, optical analysis for medicine, and fluid mechanics for marine biology, and he began a research project in active matter with Prof. Yariv Kafri in the Technion’s Department of Physics. Active matter is an interdisciplinary field that brings together the study of the collective motion of individuals and animals and the study of novel materials capable of rich phenomena, such as self-assembly.

After graduating from the Technion, Omer continued working under the supervision of Prof. Kafri as a direct-track PhD candidate in the Department of Physics. His research focuses on the dynamics of passive objects immersed in fluids of active particles. In their initial works, Omer and his collaborators studied the ratchet-like motion induced by such objects. They revealed how it leads to long-range interactions between the objects, violating Newton’s third law. In their most recent study, Omer and his collaborators showed that the same ratchet-like motion leads to anomalous transport effects that have hitherto largely been overlooked in active matter. By studying simple models, Omer hopes to gain insight into general physical principles in far-from-equilibrium systems.

Eliana Steinberg

PhD student of Prof. Ofra Benny, School of  
Pharmacy, The Hebrew University of Jerusalem  
**Dissertation topic:** Tumor-on-a-Chip: A Physiological  
Mimicking Method for Personalized Therapy in Cancer

Eliana was born and raised in Jerusalem. After completing her National Service, in which she tutored elementary school students with learning difficulties and new immigrants, she began her BSc studies in the School of Pharmacy at The Hebrew University of Jerusalem. She made the Dean's List and completed her degree *cum laude*, and then, feeling that it was important to implement what she had learned on a practical level, she worked as a licensed pharmacist for a year. Pursuing her passion for science and her desire to seek improved and innovative treatments, she went on to enter the MSc Pharm program at the Hebrew University, in the Nanotechnology excellence track. She earned her MSc Pharm *cum laude* and was awarded the prize for Outstanding Student in the MSc program with a specialization in Nanoscience and Nanotechnology.



Eliana is now studying in the Hebrew University’s direct PhD track under the supervision of Prof. Ofra Benny. Her research focuses on developing and perfecting 3-dimensional tumor-on-chip models that accurately reproduce the environment and behavior of individual cancer tumors. These models can be a key to the successful practice of personalized medicine: With the right model for the specific tumor, various drugs in different strengths can be tested on patient-derived tumor cells to determine the best treatment for each patient. It is very important to Eliana that her high-caliber research has clinical relevance and will significantly help cancer patients..







# ADAMS Fellows 2005–2022

2021–2022



## Yonatan Hamo

PhD student of Prof. Milko van der Boom and Dr. Michal Lahav, Faculty of Chemistry, The Weizmann Institute of Science

**Dissertation topic:** Nanoscale Thin Films and Devices: The Effect of Light, Magnetic and Electric Field on Charge Storage and Release



## Noam Harel

PhD student of Prof. Adi Stern, Faculty of Life Sciences, Tel Aviv University

**Dissertation topic:** The Mutational Spectra of Covid-19 and other Coronaviruses and their Impact on Viral Transmission Patterns



## Noy Nechmad

PhD Student of Prof. Gabriel Lemcoff, Chemistry Department, Ben-Gurion University of the Negev

**Dissertation topic:** Influence of Anionic Ligands in Ruthenium Olefin Metathesis Catalysts



## Efrat Pahima

PhD student of Prof. Igor Schapiro, Institute of Chemistry, The Hebrew University of Jerusalem

**Dissertation topic:** Spectral Tuning of Retinal Proteins, Computational Photochemistry and Machine Learning



## Inbal Weisbord

PhD student of Dr. Tamar Segal-Peretz, Wolfson Department of Chemical Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Block Copolymer Assembly in Micro and Nano Particles

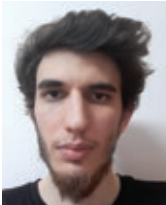


## Eyal Weiss

PhD student of Prof. Gal A. Kaminka, Department of Computer Science, Bar-Ilan University

**Dissertation topic:** Automated Planning with Runtime-Dependent Estimators





Yoav Zigdon

PhD student of Prof. Ramy Brustein, Physics Department, Ben-Gurion University of the Negev

Dissertation topic: Strings Near the Hagedorn Temperature and Inflationary Spacetimes

2020–2021



Dalya Baron

PhD student of Prof. Hagai Netzer, Department of Astrophysics, School of Physics and Astronomy, Tel Aviv University

Dissertation topic: The Role of Active Galactic Nuclei Feedback in Different Evolutionary Stages of Their Host Galaxies



Gil Bashan

PhD student of Prof. Avi Zadok, Faculty of Engineering, Bar-Ilan University

Dissertation topic: Opto-Mechanical Sensing Outside Standard Optical Fibers



Dana Binyamin

PhD student of Dr. Omry Koren, Azrieli Faculty of Medicine, Bar-Ilan University

Dissertation topic: The Fountain of Youth: How the Gut Microbiota Shapes Host Aging through the Epigenome



Yonadav Barry Ginat

PhD student of Prof. Vincent Desjacques and Prof. Hagai Perets, Physics Department, Technion – Israel Institute of Technology

Dissertation topic: Astrophysical and Cosmological Progenitors of Gravitational-Wave Sources and Their Environments



Noam Lifshitz

PhD student of Prof. Gil Kalai, Institute of Mathematics, The Hebrew University of Jerusalem

Dissertation topic: Analytic Methods in Probability and Combinatorics



Dan Liraz

PhD student of Prof. Nir Tessler, Electrical Engineering Department, The Sara and Moshe Zisapel Nano-Electronic Center, Technion – Israel Institute of Technology

Dissertation topic: Physical Processes in Photo-Electric Devices Based on Organic Materials and Solution-Processed Ones



Noam Shahar

PhD student of Prof. Iftach Yacoby, School of Plant Wise Sciences and Food Security, The George S. Weiss Faculty of Life Sciences, Tel Aviv University

Dissertation topic: Designing Synthetic Operons in Chloroplasts: Utilizing Operons for the Production of Biofuels and Other Foreign Pathways in Microalgal Plastids

2019–2020



Roie Dann

PhD student of Prof. Ronnie Kosloff, Fritz Haber Center for Molecular Dynamics, Institute of Chemistry, Faculty of Sciences and Mathematics, The Hebrew University of Jerusalem.

Dissertation topic: Dynamical Perspectives of Quantum Thermodynamic Resources and Their Utility



Ron Efrat

PhD student of Dr. Oded Berger-Tal, Marco and Louise Mitrani Department of Desert Ecology (MDDE), Sde-Boker Campus, Ben-Gurion University of the Negev

Dissertation topic: The Effects of Learning and Experience on the Survival and Migration Proficiencies of Captive-Bred and Wild Vultures



Renan Gross

PhD student of Dr. Ronen Eldan, Faculty of Mathematics and Computer Science, The Weizmann Institute of Science

Dissertation topic: Regularity and Mean-Fields Gibbs Distributions



Aviv Karnieli

PhD student of Prof. Ady Arie, Department of Physical Electronics, School of Electrical Engineering, Tel Aviv University

Dissertation topic: Quantum Effects of Photons and Electrons





Yaron Laufer

PhD student of **Prof. Sharon Gannot**, Faculty of Engineering, Bar-Ilan University

**Dissertation topic:** Bayesian Methods in Speech Processing



Lior Rotem

PhD student of **Prof. Gil Segev**, Rachel and Selim Benin School of Computer Science and Engineering, The Hebrew University of Jerusalem

**Dissertation topic:** Foundations and Applications of Cryptography for Messaging Platforms



Aseel Shomar

PhD student of **Prof. Naama Brenner**, The Wolfson Department of Chemical Engineering, and **Prof. Omri Barak**, The Rappaport Faculty of Medicine, Technion – Israel Institute of Technology

**Dissertation topic:** Cell States and Transitions in Development and Cancer: Insights from Learning Theory



Shai Tsesses

PhD student of **Prof. Guy Bartal**, Andrew & Erna Viterbi Faculty of Electrical Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Topology and Angular Momentum Transfer Between Light and Matter in Nanoscale Photonic Systems

2018–2019



Adar Adamsky

PhD student of **Dr. Inbal Goshen**, Edmond and Lily Safra Center for Brain Sciences (ELSC), The Hebrew University of Jerusalem

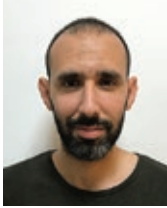
**Dissertation topic:** Dynamic Changes in Long-Term Memory Network Organization Underlie Systems Consolidation



Ayelet Arazi

PhD student of **Prof. Ilan Dinstein**, Department of Brain and Cognitive Sciences, Ben-Gurion University of the Negev

**Dissertation topic:** Neural Variability and Its Relationship with Perception, Attention and Working Memory



Yaron Ben-Ami

PhD student of **Asst. Prof. Avshalom Manela**, Faculty of Aerospace Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Effect of Thermal Boundary Conditions on Heat and Mass Transfer Processes in Rarefied Gas Flows



Anael Ben-Asher

PhD student of **Prof. Nimrod Moiseyev**, Schulich Faculty of Chemistry, Technion – Israel Institute of Technology.

**Dissertation topic:** Non-Hermitian Quantum Scattering Theory for Cold Molecular Collision Experiments



Yoav Levine

PhD student of **Prof. Amnon Shashua**, School of Computer Science and Engineering, The Hebrew University of Jerusalem

**Dissertation topic:** Bridging Deep Learning and Many-Body Physics via Tensor Networks



Itai Linial

PhD student of **Prof. Re’em Sari**, Racah Institute of Physics, Faculty of Sciences and Mathematics, The Hebrew University of Jerusalem

**Dissertation topic:** Common-Envelope Evolution of Binary Stars and Planetary Dynamics



Eran Lustig

PhD student of **Prof. Mordechai (Moti) Segev**, Faculty of Physics, Technion – Israel Institute of Technology

**Dissertation topic:** Topological Photonics – Finding and Describing Topological Phases in Classical and Quantum Optical Systems



David Mass

PhD student of **Prof. Tali Kaufman**, Department of Computer Science, Bar-Ilan University

**Dissertation topic:** High-Dimensional Expanders in the Theory of Computation



2017–2018



Leon Anavy

PhD student of **Prof. Zohar Yakhini**, Computer Science Department, Technion – Israel Institute of Technology

**Dissertation topic:** Computational Challenges in Synthetic Biology



Evgeniy Boyko

PhD student of **Prof. Moran Bercovici** and **Prof. Amir D. Gat**, Faculty of Mechanical Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Non-Uniform Electroosmotic Flow in Rigid and Elastic Microfluidic Configurations



Shachar Carmeli

PhD student of **Dr. Dmitry Gourevitch**, Department of Mathematics, Weizmann Institute of Science

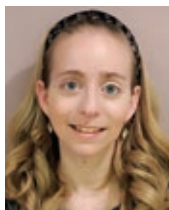
**Dissertation topic:** Harmonic Analysis on Spherical Spaces



Tuvia Gefen

PhD student of **Prof. Alex Retzker**, Racah Institute of Physics, Faculty of Sciences and Mathematics, The Hebrew University of Jerusalem

**Dissertation topic:** Quantum Metrology and Computing with NV Centers and Trapped Ions



Bracha Laufer-Goldshtein

PhD student of **Prof. Sharon Gannot** (Bar-Ilan) and **Prof. Ronen Talmon** (Technion), Faculty of Electrical Engineering, Bar-Ilan University

**Dissertation topic:** Manifold Learning Techniques for Source Localization and Array Processing



Ofer Neufeld

PhD student of **Prof. Oren Cohen**, Department of Physics, Technion – Israel Institute of Technology

**Dissertation topic:** Generation of High Harmonics with Fully Tunable Polarization



Inbal Oz

PhD student of **Prof. Oded Hod** and **Prof. Avraham Nitzan**, School of Chemistry, Faculty of Exact Sciences, Tel Aviv University

**Dissertation topic:** Simulating Non-Equilibrium Thermodynamics in Open Quantum Systems



Or Yair

PhD student of **Prof. Ronen Talmon**, Viterbi Faculty of Electrical Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Geometric Learning for Data-Driven Analysis of Dynamical Systems

2016–2017



Angelica Elkan

PhD student of **Prof. Boris Rybtchinski**, Department of Organic Chemistry, Weizmann Institute of Science

**Dissertation topic:** Hybrid Materials Based on Organic Nanocrystals and Carbon Nanotubes (CNTs)



Hezi Grisaro

PhD student of **Prof. Avraham N. Dancygier**, Faculty of Civil and Environmental Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Response of a Structural Element to Combined Loading of Explosion and Fragmentation Impacts



Yael Korem

PhD student of **Prof. Uri Alon**, Department of Molecular Cell Biology, Weizmann Institute of Science

**Dissertation topic:** Optimal Division of Labor in Cells and Tissues



Gali Noti

PhD student of **Prof. Noam Nisan**, School of Computer Science & Engineering and the Center for the Study of Rationality, The Hebrew University of Jerusalem

**Dissertation topic:** Behavioral Algorithmic Game Theory





Avia Raviv Moshe

PhD student of Prof. Yaron Oz, School of Physics and Astronomy,  
Faculty of Exact Sciences, Tel Aviv University

Dissertation topic: Lifshitz Quantum Field Theories, Gravity and Hydrodynamics



Asael Roichman

PhD student of Prof. Haim Cohen, Faculty of Life Sciences,  
Bar-Ilan University

Dissertation topic: Sirtuins in Aging and Metabolism



Alexander Shleyfman

PhD student of Prof. Carmel Domshlak, Faculty of Industrial Engineering and Management,  
Technion – Israel Institute of Technology

Dissertation topic: Symmetry Breaking and Operator Pruning in Classical  
Planning and Beyond



Amitai Yuval

PhD student of Prof. Jake Solomon, Department of Mathematics,  
The Hebrew University of Jerusalem

Dissertation topic: Geodesics of Positive Lagrangians in Almost  
Calabi-Yau Manifolds

2015–2016



Omri Azencot

PhD student of Prof. Mirela Ben-Chen, Computer Science Department, Technion – Israel  
Institute of Technology

Dissertation topic: Operator Representations in Geometry Processing



Izchak Baruch Goldshtein

PhD student of Prof. Moshe Lewenstein and Prof. Ely Porat, Department of Computer  
Science, Bar-Ilan University

Dissertation topic: Polynomial Lower Bounds on Algorithms and Data Structures



Barak Hirshberg

PhD student of Prof. Benny Gerber, School of Chemistry,  
The Hebrew University of Jerusalem

Dissertation topic: Structure, Interactions and Dynamics of Many-Atom Systems



Michael Kalyuzhny

PhD student of Prof. Ronen Kadmon, Department of Ecology, Evolution and Behavior, The Hebrew  
University of Jerusalem, and Prof. Nadav Shnerb, Department of Physics, Bar-Ilan University

Dissertation topic: A Theoretical and Empirical Analysis of Factors Affecting the  
Dynamics and Structure of Ecological Communities.



Michal Natan

PhD student of Prof. Ehud Banin and Prof. Shlomo Margel,  
Institute of Nanotechnology and Advanced Materials, Bar-Ilan University

Dissertation topic: Synthesis of Rechargeable N-halamine Nanoparticles and  
Determination of Their Antibacterial and Antibiofilm Activities



Eran Sagi

PhD student of Prof. Yuval Oreg, Department of Condensed Matter Physics,  
Weizmann Institute of Science

Dissertation topic: Strongly Interacting Topological Phases



Ido Sagi

PhD student of Prof. Nissim Benvenisty, Azrieli Center for Stem Cells and Genetic  
Research, The Hebrew University of Jerusalem

Dissertation topic: Genetic and Epigenetic Regulation in Human  
Pluripotent Stem Cells



Yinon Spinka

PhD student of Prof. Ron Peled, Department of Pure Mathematics,  
Tel Aviv University

Dissertation topic: Mathematical Models of Statistical Mechanics



2014–2015



Rivka Bekenstein

PhD student of Prof. Mordechai Segev, Faculty of Physics, Technion – Israel Institute of Technology

**Dissertation topic:** Gravitational Phenomena and Complex Wavepackets in Nonlinear Optical Systems



Sharon Fleischer

PhD student of Dr. Tal Dvir, Department of Molecular Microbiology and Biotechnology, Faculty of Life Science, Tel Aviv University

**Dissertation topic:** Engineering 3D Cardiac Stem Cell Based Patches for Treating Heart Disease



Yannai A. Gonczarowski

PhD student of Prof. Sergiu Hart and Prof. Noam Nisan, Institute of Mathematics, School of Computer Science & Engineering and Center for the Study of Rationality, The Hebrew University of Jerusalem

**Dissertation topic:** Aspects of Complexity and Simplicity in Economic Mechanisms



Ouri Karni

PhD student of Prof. Gadi Eisenstein, Faculty of Electrical Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Ultra-Fast Non-Linear Dynamic Processes in Nanometric Semiconductor Lasers and Optical Amplifiers



Jonathan Mosheiff

PhD student of Prof. Sharon Gannot (Bar-Ilan) and Prof. Ronen Talmon (Technion), Faculty of Electrical Engineering, Bar-Ilan University

**Dissertation topic:** Forbidden Induced Subgraphs and their Structural Implications



Omri Ram

PhD student of Prof. Oren Sadot, Department of Mechanical Engineering, Ben-Gurion University of the Negev

**Dissertation topic:** Experimental Study of Shock and Blast Wave Interaction with a Rigid Porous Medium



Einat Seidel Posner

MD/PhD student of Prof. Ofer Mandelboim, Lautenberg Center for Immunology and Cancer Research, The Hebrew University of Jerusalem

**Dissertation topic:** Viral Immune Evasion Mechanisms



Eliran Subag

PhD student of Prof. Ofer Zeitouni, Department of Mathematics, Weizmann Institute of Science

**Dissertation topic:** Extreme Values and Extremal Processes of Gaussian Fields

2013–2014



Ariel Afek

PhD student of Dr. David Lukatsky, Department of Chemistry, Ben-Gurion University of the Negev

**Dissertation topic:** Design Principles and Consequences of Nonconsensus Protein-DNA Binding



Yoav Bauman

PhD student of Prof. Ofer Mandelboim, Lautenberg Center for Immunology and Cancer Research, The Hebrew University of Jerusalem

**Dissertation topic:** Pathogen Recognition by Natural Killer Cells



Ronen Dar

PhD student of Prof. Meir Feder and Prof. Mark Shtaiif, School of Electrical Engineering, Tel Aviv University

**Dissertation topic:** Information Theory in Optical-Fiber Communications

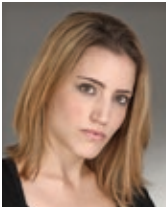


Anna Frishman

PhD student of Prof. Gregory Falkovich, Department of Physics of Complex Systems, Weizmann Institute of Science

**Dissertation topic:** A Search for Statistical Laws in Turbulent Systems





Livnat Jerby Arnon

PhD student of Prof. Eytan Ruppín, School of Computer Science, Tel Aviv University

Dissertation topic: Genome-Scale Modeling of Cancer Genetics and Metabolism Toward the Identification of Selective Anticancer Treatments



Assaf Manor

PhD student of Prof. Carmel Rotschild, Faculty of Mechanical Engineering, Technion – Israel Institute of Technology

Dissertation topic: Thermodynamic Light Management for Third Generation Photovoltaics



Sivan Refaely-Abramson

PhD student of Prof. Leeor Kronik, Department of Materials and Interfaces, Weizmann Institute of Science

Dissertation topic: A Generalization of the Optimally-Tuned Range-Separated Hybrid Scheme to the Solid-State



Liran Rotem

PhD student of Prof. Vitali Milman, School of Mathematical Sciences, Tel Aviv University

Dissertation topic: Asymptotic Geometric Analysis: Log-Concavity,  $\alpha$ -Concavity, Quasi-Concavity



Eitan Schechtman

PhD student of Prof. Hagai Bergman, The Interdisciplinary Center for Neural Computation (ICNC), The Hebrew University of Jerusalem

Dissertation topic: The Neural Correlates of Basal Ganglia Abnormalities in the Chronic Phencyclidine (PCP) Primate Model of Schizophrenia



Avishay Tal

PhD student of Prof. Ran Raz, Department of Computer Science and Applied Mathematics, Weizmann Institute of Science

Dissertation topic: Analysis of Boolean Functions in Theoretical Computer Science

2012–2013



Tslil Ast

PhD student of Dr. Maya Schuldiner, Department of Molecular Genetics, Weizmann Institute of Science

Dissertation topic: Uncovering the Translocation and Quality Control Mechanisms of Glycosylphosphatidylinositor (GPL) Anchored Proteins



Assaf Ben Moshe

PhD student of Prof. Gil Markovich, Department of Chemical Physics, Tel Aviv University

Dissertation topic: Chiroptical Effects Induced in Metal and Semiconductor Nanoparticles



Miri Krupkin

PhD student of Prof. Ada Yonath, Department of Structural Biology, Weizmann Institute of Science

Dissertation topic: Towards the Determination of the Structure of the Mycobacterium Smegmatis Ribosome and Studies on the Properties of the Prebiotic Ribosome



Nir Lazarovich

PhD student of Prof. Michah Sageev, Department of Mathematics, Technion – Israel Institute of Technology

Dissertation topic: Non-Positively Curved Homogeneous Polygonal Complexes



Or Ordentlich

PhD student of Prof. Uri Erez, School of Electrical Engineering, Tel Aviv University

Dissertation topic: Robust Lattice Schemes for Multi-User Communication Networks



Liel Sapir

PhD student of Prof. Daniel Harries, Institute of Chemistry and The Fritz Haber Research Center, The Hebrew University of Jerusalem

Dissertation topic: Modeling Osmolyte-Induced Conformational Changes in Biomacromolecules





David Tsivion

PhD student of Prof. Ernesto Joselevich, Department of Materials and Interfaces, Weizmann Institute of Science

Dissertation topic: Guided Growth of Horizontal Nanowires



Erez Zohar

PhD student of Prof. Benni Reznik, School of Physics and Astronomy, Tel Aviv University

Dissertation topic: Quantum Simulations of Quantum Field Theories

2011–2012



Dmitry Batenkov

PhD student of Prof. Yosef Yomdin, Department of Mathematics, Weizmann Institute of Science

Dissertation topic: Algebraic Reconstruction of Geometric Models from Integral Measurements



Avraham Braun

PhD student of Prof. Jeffrey Gordon, Department of Solar Energy and Environmental Physics, Ben-Gurion University of the Negev

Dissertation topic: The Physics of High Carrier Injection Rates in Concentrator Photovoltaics



Sophia Buhbut

PhD student of Prof. Arie Zaban, Institute of Chemistry, Bar-Ilan University

Dissertation topic: FRET Mechanism Based on Nanomaterials in Dye-Sensitized Solar Cells: Synthesis, Characterization and Applications



Amir Erez

PhD student of Prof. Yigal Meir, Department of Physics, Ben-Gurion University of the Negev

Dissertation topic: Superconductor to Insulator Transition in Thin Films



Daphna Nachmani

PhD student of Prof. Ofer Mandelboim, Lautenberg Center for Immunology and Cancer Research, The Hebrew University of Jerusalem

Dissertation topic: MicroRNAs in Immune Regulation: Viral Mimicry of Host Mechanisms



Amir Nevet

PhD student of Prof. Meir Orenstein, Department of Electrical Engineering, Technion – Israel Institute of Technology

Dissertation topic: Two-Photon Processes in Micro and Nano Semiconductor Structures



Doron Puder

PhD student of Prof. Nati Linial, Einstein Institute of Mathematics, The Hebrew University of Jerusalem

Dissertation topic: The Combinatorial, Algebraic and Topological Aspects of Word Maps



Eran Small

PhD student of Prof. Yaron Silberberg, Department of Physics of Complex Systems, Weizmann Institute of Science

Dissertation topic: Statistical Properties of Light Propagating in Non-Linear Systems



Hadas Soifer

PhD student of Prof. Nirit Dudovich, Department of Physics of Complex Systems, Weizmann Institute of Science

Dissertation topic: Probing Electronic Wavefunctions via High Harmonic Generation



Amir Wand

PhD student of Prof. Sanford Ruhman, Department of Chemistry, The Hebrew University of Jerusalem

Dissertation topic: Investigation of the Photochemistry of Retinal Proteins and Model Systems Using Novel Techniques of Ultrafast Spectroscopy: Resolving the Dynamics as Well as Structural Information of the Excited States



2010–2011



Avital Adler

PhD student of Prof. Hagai Bergman, Interdisciplinary Center for Neural Computation (ICNC), The Hebrew University of Jerusalem

Dissertation topic: Value Encoding in the Striatum in View of Serotonin Neurotransmission



Leonid Barenboim

PhD student of Prof. Michael Elkin, Department of Computer Science, Ben-Gurion University of the Negev

Dissertation topic: Efficient Network Utilization in Locality-Sensitive Distributed Algorithms



Arren Bar-Even

PhD student of Prof. Ron Milo, Department of Plant Sciences, Weizmann Institute of Science

Dissertation topic: The Design, Analysis and Testing of Synthetic Carbon Fixation Cycles



Omer Bobrowski

PhD student of Prof. Robert J. Adler, Department of Electrical Engineering, Technion – Israel Institute of Technology

Dissertation topic: Some Topics in the Algebraic Topology of Random Fields



Ronit Bustin

PhD student of Prof. Shlomo Shamai, Department of Electrical Engineering, Technion – Israel Institute of Technology

Dissertation topic: The I-MMSE Approach for Multi-Terminal Problems in the Gaussian Regime



Klim Efremenko

PhD student of Prof. Amnon Ta-Shma and Prof. Oded Regev, Department of Computer Science, Tel Aviv University

Dissertation topic: Algebraic Constructions in Computational Complexity



Yoav Livneh

PhD student of Prof. Adi Mizrahi, Department of Neurobiology, The Hebrew University of Jerusalem

Dissertation topic: Adult Neurogenesis: From Synapse Formation Through Sensory Coding to Animal Behavior



Itai Roffman

PhD student of Prof. Eviatar Nevo and Prof. Avraham Ronin, The International Graduate Center of Evolution, University of Haifa

Dissertation topic: Studying Suite of *Homo* Traits in *Pan*: Supporting Cultural and Genetic Evidence for their Inclusion in the *Homo* Genus



Yoav Oved Rosenberg

PhD student of Prof. Jiwchar Ganor, Department of Geological and Environmental Sciences, Ben-Gurion University of the Negev

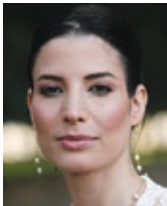
Dissertation topic: The Fate of Radium in Evaporitic Systems



Osip Schwartz

PhD student of Prof. Dan Oron, Department of Physics of Complex Systems, Weizmann Institute of Science

Dissertation topic: Nonlinear Microscopy with Nanoparticles



Adi Sheinfeld

PhD student of Prof. Avishay Eyal, Electrical Engineering, Tel Aviv University

Dissertation topic: Optical Detection of Alzheimer’s Disease Via Ocular Spectroscopy



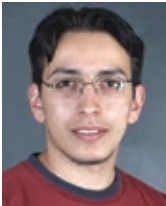
Avital Swisa

PhD student of Prof. Yuval Dor, Department of Developmental Biology and Cancer Research, Faculty of Medicine, The Hebrew University of Jerusalem

Dissertation topic: Role of LKB1 in Pancreatic Beta Cell Dynamics



2009–2010



**Monther Abu-Remaileh**

PhD student of Prof. Yehudit Bergman, Department of Genetics, The Hebrew University of Jerusalem

**Dissertation topic:** Understanding the Molecular Mechanism of Oct-3/4 Oncogenicity



**Danny Ben-Zvi**

PhD student of Prof. Naama Barkai and Prof. Ben-Zion Shilo, Department of Molecular Genetics, Weizmann Institute of Science

**Dissertation topic:** Scaling and Robustness in Embryonic Development



**Oded Berger-Tal**

PhD student of Prof. David Saltz, Department of Desert Ecology, Ben-Gurion University of the Negev

**Dissertation topic:** Movement Ecology of Persian Fallow Deer



**Ronen Gabizon**

PhD student of Prof. Assaf Friedler, Institute of Chemistry, The Hebrew University of Jerusalem

**Dissertation topic:** Activating Proteins by Shifting their Oligomerization Equilibrium: A New Approach to Drug Design



**Alex Hayat**

PhD student of Prof. Meir Orenstein, Faculty of Electrical Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Applications of Multi-Photon Processes for Semiconductor Quantum Photonics



**Efrat Mashiach**

PhD student of Prof. Haim Wolfson and Prof. Ruth Nussinov, School of Computer Science, Tel Aviv University

**Dissertation topic:** Structural Bioinformatics: Flexible Molecular Docking



**Or Meir**

PhD student of Prof. Oded Goldreich, Department of Computer Science and Applied Mathematics,, Weizmann Institute of Science

**Dissertation topic:** Combinatorial Construction of Probabilistic Proof Systems



**Moshe Mishali**

PhD student of Prof. Yonina Eldar, Faculty of Electrical Engineering, Technion – Israel Institute of Technology

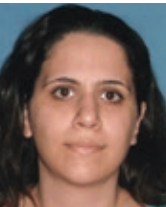
**Dissertation topic:** Compressive Processing of Analog Signals



**Uri Roll**

PhD student of Prof. Lewi Stone, Department of Zoology, Tel Aviv University

**Dissertation topic:** Spatial Perspectives of Epidemiological and Ecological Problems



**Sivan Sabato**

PhD student of Prof. Naftali Tishby, School of Computer Science and Engineering, The Hebrew University of Jerusalem.

**Dissertation topic:** Supervised Learning with Partial Information



**Efrat Shema**

PhD student of Prof. Moshe Oren, Department of Molecular Cell Biology, Weizmann Institute of Science

**Dissertation topic:** RNF20 as a Novel Tumor Suppressor: Exploring its Roles in Transcriptional Regulation, Formation and Progression of Cancer, Senescence and Development

2008–2009



**Keren Censor**

PhD student of Prof. Hagit Attiya, Computer Science Department, Technion – Israel Institute of Technology

**Dissertation topic:** Probabilistic Methods in Distributed Computing





Emanuele Dalla Torre

PhD student of **Dr. Ehud Altman**, Department of Condensed Matter Physics, Weizmann Institute of Science

**Dissertation topic:** Strongly Correlated States in Ultra-Cold Atoms



Noam Gross

PhD student of **Prof. Lev Khaykovich**, Department of Physics, Bar-Ilan University

**Dissertation topic:** Nonlinear Dynamics and Interactions of Bright Matter-Wave Solitons in a Bose-Einstein Condensate.



Ishay Haviv

PhD student of **Prof. Oded Regev**, School of Computer Science, Tel Aviv University

**Dissertation topic:** Combinatorics and Theoretical Aspects of Computer Sciences: Complexity of Lattice Problems



Amir Ingber

PhD student of **Prof. Meir Feder**, School of Electrical Engineering, Tel Aviv University

**Dissertation topic:** Coding Methods and Bounds for the Bandwidth - Limited Regime



Mor Mordechai Peretz

PhD student of **Prof. Shmuel Ben-Yaakov**, Department of Electrical & Computer Engineering, Ben-Gurion University of the Negev

**Dissertation topic:** Time Domain Design of Digital Controllers for PWM Converters



Michael Orlov

PhD student of **Prof. Moshe Sipper**, Department of Computer Science, Ben-Gurion University of the Negev

**Dissertation topic:** Evolutionary Computation



Eran Segev

PhD student of **Prof. Eyal Buks**, Faculty of Electrical Engineering, Technion – Israel Institute of Technology

**Dissertation topic:** Back-Reaction Cooling and Quantum Phenomena in Nanomechanical Resonators



Gil Segev

PhD student of **Prof. Moni Naor**, Department of Computer Science and Applied Mathematics, Weizmann Institute of Science

**Dissertation topic:** The Complexity of Resilient Sketches



Reut Shema

PhD student of **Prof. Yadin Dudai**, Department of Neurobiology, Weizmann Institute of Science

**Dissertation topic:** The Role of PKMzeta in Long Term Memory Storage in the Rat Brain

2007–2008



Avraham Ben-Aroya

PhD student of **Prof. Oded Regev** and **Prof. Amnon Ta-Shma**, School of Computer Science, Tel Aviv University

**Dissertation topic:** Quantum Computation and Quantum Information



Shai Carmi

PhD student of **Prof. Shlomo Havlin**, Department of Physics, Bar-Ilan University

**Dissertation topic:** Complex Networks: Theory and Applications



Chen Davidovich

PhD student of **Prof. Ada Yonath**, Department of Structural Biology, Weizmann Institute of Science

**Dissertation topic:** Ribosome Structure and Function





Shahar Dobzinski

PhD student of Prof. Noam Nisan, School of Computer Science and Engineering, The Hebrew University of Jerusalem

Dissertation topic: The Power of Approximations in Mechanism Design



Moshe Goldstein

PhD student of Prof. Richard Berkovits, Department of Physics, Bar-Ilan University

Dissertation topic: Interference Effects in Interacting Mesoscopic Systems



Amir Goren

PhD student of Prof. Gil Ast, Department of Human Molecular Genetics and Biochemistry, Tel Aviv University

Dissertation topic: Inferring Regulatory Elements of Splicing Using Comparative Genomics



Dan Hermelin

PhD student of Prof. Gad M. Landau, Department of Computer Science, University of Haifa

Dissertation topic: Algorithmic Challenges in RNA Comparative Analysis



Yoav Lahini

PhD student of Prof. Yaron Silberberg, Faculty of Physics, Weizmann Institute of Science

Dissertation topic: Disordered Nonlinear Systems



Guy Ron

PhD student of Prof. Eliezer Piasetzky, Department of Physics, Tel Aviv University

Dissertation topic: Measurement of the Proton Elastic Form Factors at Low Q2



Avraham Saig

PhD student of Prof. Ehud Ahissar and Dr. Amos Arieli, Department of Neurobiology, Weizmann Institute of Science

Dissertation topic: Guiding Principles for Sensory Substitution: From Vision to Touch

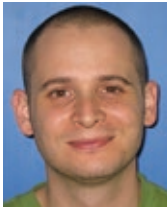


Alexander Sodin

PhD student of Prof. Vitali Milman, School of Mathematical Sciences, Tel Aviv University

Dissertation topic: Probabilistic Methods in Asymptotic Geometric Analysis

2006–2007



Haim Beidenkopf

PhD student of Prof. Eli Zeldov, Faculty of Physics, Weizmann Institute of Science

Dissertation topic: Vortex Thermodynamics in High-Temperature Superconductors



Liat Benmoyal Segal

PhD student of Prof. Hermona Soreq, Department of Biological Chemistry, and Prof. Hagai Bergman, Department of Physiology, The Hebrew University of Jerusalem

Dissertation topic: The Role of the Cholinergic System in the Pathogenesis of Parkinson’s Disease



Yael Elbaz

PhD student of Prof. Shimon Schuldiner, Department of Biological Chemistry, The Hebrew University of Jerusalem

Dissertation topic: Structure-Function Study of Multidrug Transporters



Olga Khersonsky

PhD student of Prof. Dan Tawfik, Faculty of Chemistry, Weizmann Institute of Science

Dissertation topic: Mechanistic Enzymology: From Classical Tools to Directed Evolution





Dana Moshkovitz

PhD student of Prof. **Ran Raz**, Faculty of Mathematics and Computer Science, Weizmann Institute of Science

Dissertation topic: Probabilistically Checkable Proofs



Ariel Procaccia

PhD student of Prof. **Jeffrey S. Rosenschein**, School of Computer Science and Engineering, The Hebrew University of Jerusalem

Dissertation topic: The Theoretical Foundation of Multi-Agent Systems (MAS)



Carmel Rotschild

PhD student of Prof. **Moti Segev**, Physics Department, Technion – Israel Institute of Technology

Dissertation topic: Soliton Interactions in Nonlocal Nonlinear Media



Ofer Shayevitz

PhD student of Prof. **Meir Feder**, School of Electrical Engineering, Tel Aviv University

Dissertation topic: Universal Communications with Feedback



Amir Shlomai

PhD student of Prof. **Yosef Shaul**, Faculty of Biochemistry, Weizmann Institute of Science

Dissertation topic: Metabolic Alterations in the Liver and Hepatitis B Virus Gene Expression



Noam Stern

PhD student of Prof. **Ofer Mandelboim**, Lautenberg Center for Immunology and Cancer Research, The Hebrew University of Jerusalem

Dissertation topic: Natural Killer (NK) Cells

2005–2006



Yael Eshed-Eisenbach

PhD student of Prof. **Elior Peles**, Department of Molecular Cell Biology, Weizmann Institute of Science

Dissertation topic: Neuro-Glial Interactions



Nathan Keller

PhD student of Prof. **Gil Kalai**, Einstein Institute of Mathematics, The Hebrew University of Jerusalem

Dissertation topic: Probabilistic Combinatorics and Its Relations with Harmonic Analysis



Tal Lev-Ami

PhD student of Prof. **Shmuel Sagiv**, School of Computer Science, Tel Aviv University

Dissertation topic: Efficient Transformers for the Verification of Heap Manipulating Programs



Raz Palty

PhD student of **Dr. Israel Sekler**, Department of Physiology and Cell Biology, Ben-Gurion University of the Negev

Dissertation topic: Characterization of the Novel Exchanger NCLX – A FLJ2233 Gene Product



Sharon Schwartz

PhD student Prof. **Moti Segev**, Physics Department, Technion – Israel Institute of Technology

Dissertation topic: Nonlinear Optics in CZT:V





Top left: Prof. Ruth Arnon and her two awardees, Dr. Anael Ben-Asher on her right and Dr. Yael Korem Kohanim on her left