ADAMS
Fellowships מלגות אדמס

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

סמינר תשפ"א | Seminar 2021

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Adams Seminar

2021

סמינר אדמס תשפ"א

Guest Lecturer

Prof. Daniel A. Chamovitz

Professor of Plant Pathology
President, Ben-Gurion University of the Negev

Editors
Deborah Greniman, Bob Lapidot

Photographer
Michal Fattal

Graphic Design
Navi Katzman-Kaduri

The Israel Academy of Sciences and Humanities
P.O.Box 4040 Jerusalem 9104001
Tel 972-2-5676207
E-mail batsheva@academy.ac.il
www.adams.academy.ac.il

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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 approximately 135 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 or call 972-2-5676207. Visit our website: adams.academy.ac.il

Marcel Adams

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 Hazioni 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 100th 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 is large enough to provide $1 million annually to outstanding Ph.D. students, covering their full tuition and living expenses throughout 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 Seventeenth Cycle of the Adams Fellowship Program.

Prof. Nili Cohen

President of the Israel Academy

I am very pleased to greet our new Adams Fellows for 2021–2022 here at the Israel Academy of Sciences and Humanities. The Adams Fellowships Program is one of the most important programs of the Israel Academy. Since its inauguration in May 2005, 142 Adams Fellows, PhD students of the highest academic standing, have been inducted. Many of them now hold research and teaching positions in major universities and research centers and in the high-tech and biotech industries, mostly in Israel and also abroad. We are happy to introduce this year's seven new fellows briefly in this brochure.

Adams Fellows enjoy sustained financial support for three to four uninterrupted years of doctoral study. The amount of the grant has been increased to compensate for inflation and currency fluctuation and to maintain the prestige of the Adams Fellowships. The Fellows also enjoy two privileges unique to this graduate student support program. Each Adams Fellow is eligible for an annual international study grant of $3,000, to be used for active participation in international scientific conferences/workshops, for laboratory study abroad, for international scientific collaboration or to interview for a postdoctoral position.

Adams Fellows are also given the opportunity to interact with one another and to form a small science community of their own, through initiatives such as invited lectures by renowned scientists at annual seminars and conferences, science communication workshops and field trips. We are confident that the Adams Fellowships constitute a meaningful contribution to the encouragement and training of excellent scientists in Israel.

I would like to express my heartfelt admiration and appreciation of Mr. Marcel Adams for playing such a vital role in the support of Israel's brilliant young scientists. I was privileged to meet the late Marcel Adams and his dear late wife Annie while I was rector of Tel-Aviv University, and I marveled then at their vision and commitment to the advancement of science. Since getting to know his family personally, I have been extremely impressed by their steadfast devotion to the promotion of science. It was a great honor and a source of immense personal satisfaction to work with Marcel and his children over the years.

Prof. Daniel Chamovitz

President, Ben-Gurion University of the Negev

Guest Lecturer on

WHY WE CARE ABOUT WHAT PLANTS KNOW

Prof. Daniel Chamovitz is the seventh President of Ben-Gurion University of the Negev. Previously he was a professor at Tel Aviv University, where he served as Dean of the George S. Wise Faculty of Life Sciences and founded the Program in Food Safety and Security.

Chamovitz grew up in Aliquippa, PA, and studied both at Columbia University and at The Hebrew University of Jerusalem, where he received his PhD in Genetics. He did postdoctoral research at Yale University with the support of fellowships from the European Molecular Biology Organization and the Human Frontier Science Research Program. He returned to Israel on the prestigious Alon Fellowship awarded by the Council for Higher Education in Israel to outstanding young researchers. Chamovitz has also held positions as a visiting scientist at the Fred Hutchinson Cancer Research Center in Seattle and as a visiting professor at Peking University. His scientific career has been characterized by novel and field-defining research on plant biology, biochemistry, developmental biology and systems biology. He has published numerous peer-reviewed research articles and is on the editorial boards of several scientific journals.

Chamovitz is a sought-after speaker and science commentator. He has lectured worldwide on issues of global food security. He represented the Israel Academy of Sciences and Humanities in the Food and Nutritional Security and Agriculture Program of the Association of Academies and Scientific Societies of Asia (AASSA), and in the Inter-Academy Partnership. His 2012 book *What a Plant Knows* has been translated into 18 languages and was featured in the world press and media. While serving as President of Ben-Gurion of the Negev, Chamovitz retains his passion for teaching and lectures to groups about the role of plant biology in feeding a growing world. His on-line MOOC class has been attended by more than 100,000 students from all over the world.

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. Nili Cohen, Academy Vice-President Prof. David Harel, 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 fifteen years.

If there is one good thing that has come out of the COVID pandemic, it is our realization of the fundamental importance of direct, non-electronic human interactions. Last year, this did not happen, as we had to postpone the Adams seminar. Our ability to meet in person for the 2021 Adams seminar is thus not only a celebration of the victory of science over disease, but also a celebration of our ability to reinforce once again the togetherness of the Adams fellows community.

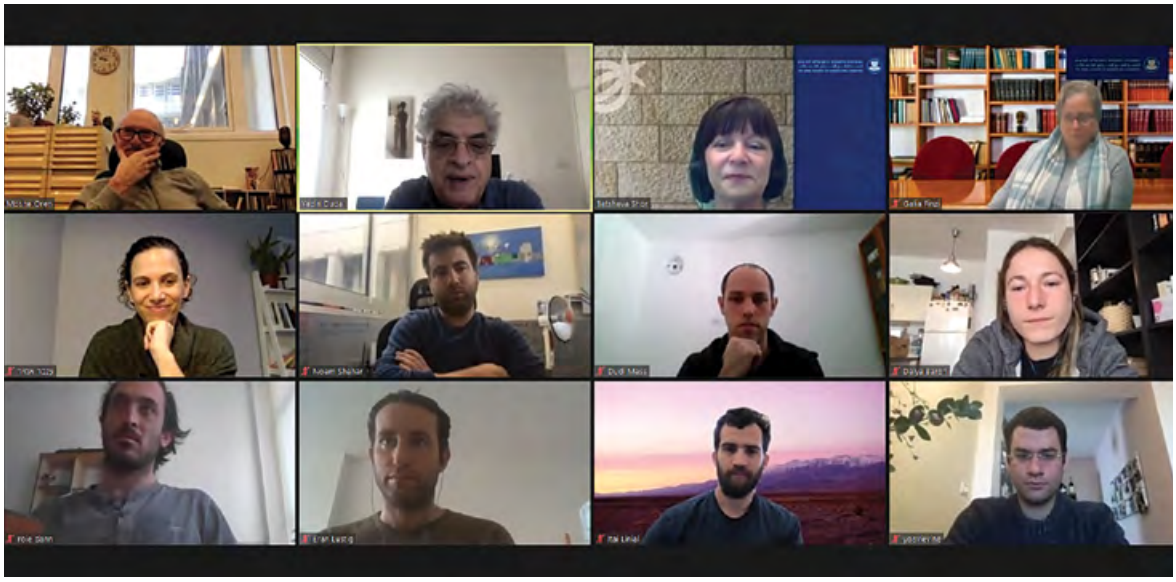
Marcel Adams, who established the Adams Fellowships program, was born in 1920 and lived in Europe through the years of the Second World War and the Holocaust. With the help of the Jewish Agency, he was able to escape from Europe in 1944 and come to what was at that time still Palestine. Although he moved to Montreal, Canada, in 1951, he has always remained loyal to the young state of Israel. Marcel Adams 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 invest in advancing knowledge in Israel. And as a person with a track record of making wise choices, he decided to invest in our future generation of scientific leaders.

This entrusts you, Adams Fellows, with a special mission: You are expected not only to advance your own careers, but also to fulfil a dream – Marcel's dream of making Israel a hub of scientific excellence and a powerhouse of human knowledge. We members of the Adams committee make every effort to ensure that we pick the best of the best. You, in turn, should prove that we made the right choices.

And this is perhaps a good time to sound a word of caution. These days, many "basic" discoveries are rapidly transformed into startups; after all, we are "startup nation." This is a blessing, but also

a danger. Mixing pure academic research with business considerations may cause us to refrain from sharing our knowledge with colleagues, lest they "steal our secrets" and outcompete us. That goes against the spirit of pure science and slows down our journey to better understand our universe and everything therein. I believe that, in this world, collaboration is the best guarantee of accelerated progress. Don't be afraid to share! And, most importantly: never lose your curiosity and your passion for knowledge!

And when your time comes to mentor the next generation of students, please make every effort to keep their passion as intense as yours, to ensure that they remain driven by curiosity and not by convenience. It is a particular joy to us, Adams committee members, to see new Adams Fellows whose mentors are former recipients of Adams Fellowships. I hope that, when time comes, the future Chair of the Adams Committee will be greeting your students. In the meantime, let me wish you all a lot of satisfaction in your scientific endeavors and in moving successfully to the next stages of your careers.



Adams Fellows in their ZOOM Science Presentation Workshops

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. Gil Kalai

Prof. Jacob Klein

Prof. Micha Sharir

Prof. Hermona Soreq

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. David Kazhdan

Prof. Avraham Nitzan
Prof. Elon Lindenstrauss
Prof. Yosef Shiloh
Prof. Igal Talmi
Prof. Jacob Ziv

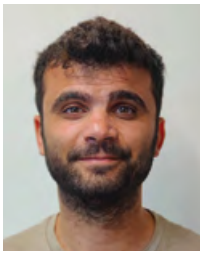
ADAMS Fellows

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



Born in Jerusalem in 1991, Yonatan served for three years in the Combat Intelligence Collection Corps of the Israel Defense Forces. Yonatan studied chemistry at the Hebrew University and co-authored a paper in the area of biosensors during his BSc studies. He received the Dean's award during his BSc studies and a scholarship for his academic excellence. He also received an award from the Feinberg Graduate School of the Weizmann Institute of Science for his outstanding achievements during his MSc studies. His results were reported in *Angewandte Chemie*. By understanding the fundamental structural design principles of his nanoscale thin films, he was able to predict and design both their electrochemical and electrochromic properties. The demonstrated bilayer operates as a multicolored charge storage device. Currently, he is a PhD student (direct track) at the Weizmann Institute of Science, where he continues to conduct research with Prof. Milko van der Boom and Dr Michal Lahav. Last year, Yonatan initiated a new project related to electrochemical screening for the spike glycoprotein of coronavirus. The Dean of the Faculty of Chemistry awarded him with funding to pursue his ideas.

Yonatan guides high school students who are developing experiments at the Ramon SpaceLab to be performed at the International Space Station (ISS). The SpaceLab program, under the auspices of the Ramon Foundation, exposes students to cutting-edge research. They consult with leading experts from academe as well as from the Israeli and the American space agencies (ISA and NASA). He believes that igniting scientific curiosity among teenagers while providing them with tools to deal with challenges is the key to creating a better society.

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

Noam Harel was born in the US and raised in Ramot Meir, a small moshav in the center of Israel. She completed three years of military service in an elite intelligence corps technological unit. Noam enrolled in a joint degree of biological and medical sciences in Tel Aviv university for her undergraduate studies and graduated with honors. During her studies, she worked as a research assistant in the labs of Professors Adi Stern and Uri Gophna, studying interactions between "cheater" viruses in the MS2 bacteriophage. She then continued in Prof. Adi Stern's group in the direct PhD track.

Noam studies evolution and the genetics of viruses, applying the powerful combination of laboratory work with bioinformatics and data analysis to answer complex biological questions. Since the emergence of the COVID-19 pandemic, Noam has naturally shifted focus to study the SARS-CoV-2 virus, leading high impact projects ranging from the patterns of spread of the virus into and within Israel at the beginning of the pandemic and assessing vaccine effectiveness against different variants of concern of SARS-CoV-2.

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

Noy Nechmad was born in 1992 and raised in Shoham, Israel. From a young age, she was curious about how the world works,from simple questions like why is the grass green? and why does rain fall? to more profound questions about life and its evolution. To fulfill her curiosity and desire for knowledge, she decided to study the central science, chemistry, at the Ben-Gurion University of the Negev. After finishing her undergraduate studies in the Chemistry Department, Noy continued her graduate studies under the supervision of Prof. Gabriel Lemcoff.

Noy's research is focused on organometallic chemistry and catalysis. One of her main breakthroughs was the synthesis and discovery of new iodine-containing ruthenium catalysts with singular and outstanding activity. Her work has brought to the scientific community novel methods to prepare organic molecules by rearranging carbon-carbon double bonds by new specific pathways. Her PhD studies are currently focused on finding new methods to produce useful molecules and novel polymer research using her catalysts. For example, she is working on an amazing procedure to depolymerize a polymer back to its original building blocks. For now, just beginning the journey, she wishes to complete the cycle and find a way to use and reuse polymers to help solve one of the serious pollution problems that our world faces today. Noy's curiosity about the world around her has helped her to create new knowledge, which she now shares by publishing her research work in the top chemistry journals and in by mentoring younger students and transmitting to them her passion for chemistry.

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

Efrat was drawn to chemistry from an early age, which led her to pursue a BSc degree in chemistry at Bar-Ilan University. At that stage, she was awarded a scholarship from the Israeli Ministry of Science as part of a national project to encourage excellent students to engage in research fields of alternative energy. This research resulted in her first publication. She then continued towards the MSc degree at Bar-Ilan University under the supervision of Prof. Dan T. Major and became enthalled by computational chemistry.

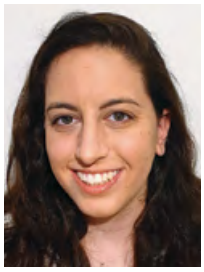
Computational chemistry utilizes programs based on quantum and classical mechanics to simulate chemical reactions and answer challenging questions that cannot be addressed exclusively by experiments. These simulations reveal the mechanism of how and why atoms bond by following the fascinating rules of quantum chemistry (and a lot of math).

Efrat entered the PhD program at the Hebrew University of Jerusalem under the supervision of Prof. Igor Schapiro. The main goal of her research is to predict the color of light-sensitive proteins, called rhodopsins, and rationally design new variants with desired properties. Rhodopsins are found in many organisms (including humans, where they enable vision in low-light conditions. They are used in the biotechnology field of optogenetics to help understand how the brain works and to cure diseases. This research utilizes computational photochemistry in combination with machine learning. This joint approach will allow a reduction of the high computing cost and provide a molecular level insight into how the protein environment controls the interaction with light.

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



Inbal was born and raised in Maccabbim-Re'ut, Israel, and now resides in Haifa with her husband, Anthony. After completing military service in the Israeli Air Force, she began her BSc in the Chemical Engineering Department at the Technion – Israel Institute of Technology. While pursuing her bachelor's degree, she discovered a passion for teaching and began tutoring fellow students in various subjects.

Inbal is now studying for her PhD in the Technion's Direct-to-PhD track under the supervision of Dr. Tamar Segal-Peretz. Her research focuses on the self-assembly of block copolymers under soft spherical confinement and the selective growth of inorganic materials within the block copolymer polar domains. Inbal employs cutting-edge electron microscopy methods including transmission electron microscopy, tomography, and focused ion beam-scanning electron microscopy tomography to investigate the obtained structures. In addition to her own research, Inbal helps apply these same methods to advance other projects in the group. She also teaches and is in charge of the departmental chemical engineering laboratories and teaches practical courses in scanning electron microscopy to prospective users.

For achievements during her PhD, Inbal has won several awards and fellowships, including best student talk at a scientific conference, the Russell Berrie Nanotechnology fellowship, the Irwin and Joan Jacobs fellowship, and the Aharon and Ephraim Katzir Travel fellowship.

Eyal Weiss

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

Dissertation topic: Automated Planning with Runtime-Dependent Estimators

Eyal was born in 1988 and grew up in Tel Aviv, where he currently lives with his beloved wife, Yael, and his lovely dog, Berta. He carried out five years of military service, one year as a cadet in the Israeli Air Force Flight Academy and four years in a special-forces unit. With a passion for knowledge and a joy of learning, he completed his BSc, *summa cum laude*, in electrical and electronics engineering at Tel Aviv University in 2016. During his undergraduate studies, he received several awards, including Dean's Honors, every year of his BSc studies.

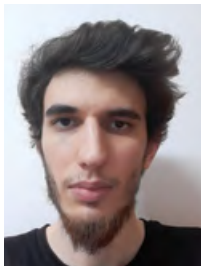
Eyal continued on a direct track to pursue his MSc under the supervision of Prof. Michael Margaliot, where he focused on discrete optimization problems in the field of control theory, relating to Boolean Networks, a particular form of nonlinear dynamical systems. During this period, he fell in love with the idea of algorithmically controlling complex physical systems, which led him to seek an appropriate scientific framework. He eventually found one at the intersection of artificial intelligence and robotics.

Eyal is currently pursuing his PhD in computer science at Bar-Ilan University under the supervision of Prof. Gal A. Kaminka. His research is in a fascinating field called automated planning, which studies algorithmic frameworks for generating (model-based) action plans for agents. He is working on extending the scope of current methods to support richer (i.e. more informed) action plans. Eyal believes that these capabilities are an absolute necessity for highly autonomous agents and will play a major role in the evolving field of robotics.

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



Yoav Zigdon is 24 years old and lives in Be'er Sheva. With his father's encouragement Yoav started a BSc in physics at the Open University, in parallel to middle school. After a year of studies, he made a transition to the Ben-Gurion University of the Negev, where, at the age of 19, he completed the BSc with the highest honors. He received multiple awards for academic excellence. Yoav is interested in the nature of black holes and the physics of the early universe. In his Master's degree, he researched radiation properties from black holes and how an observer may gain information about the interior.

His PhD research aims at showing that a special system of interacting long strings at high temperatures can account for the primordial epoch of the Universe. This is demonstrated through comparison with a conventional theory of the early Universe; a space that expands exponentially. Yoav's most recent paper, his third one, established a mathematical description of these strings. Such a system of strings may describe the initial state of the Universe in which we live.

Adams Field Trip to Akko, September 2020

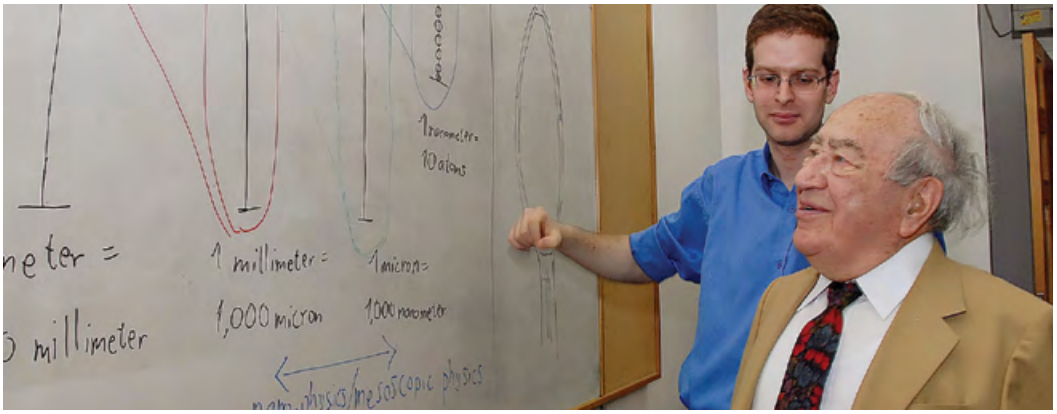








Marcel's Precious Moments with his Adams Fellows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1 micron =
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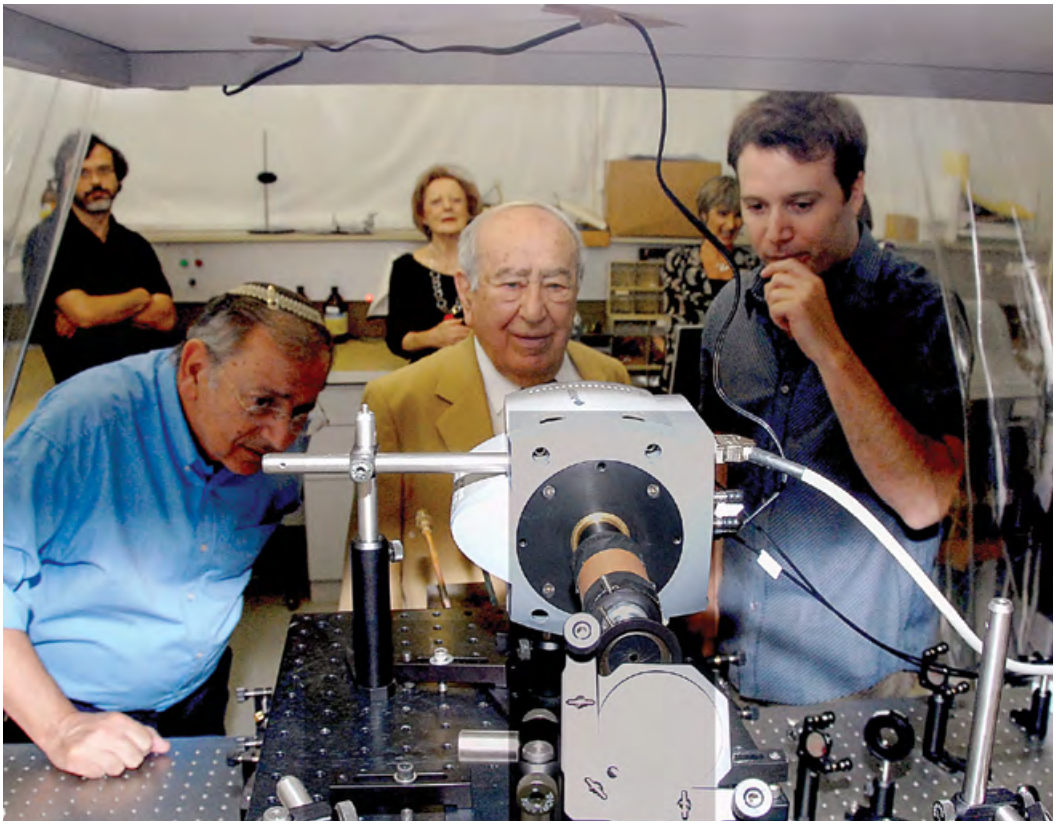
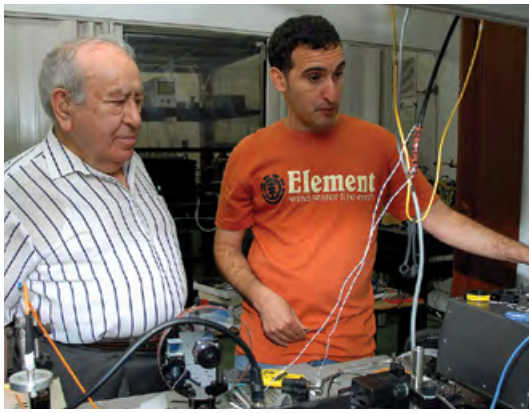



Element

ADAMS Fellows

2005–2021

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

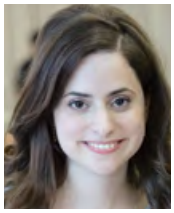
PhD student of **Prof. Sharon Gannot**, Faculty of Engineering, Bar-Ilan University

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

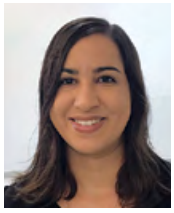
Dissertation topic: Topology and Angular Momentum Transfer Between Light and Matter in Nanoscale Photonic Systems

2018–2019

Adar Adamsky

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

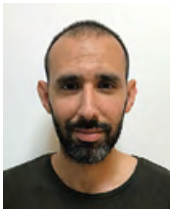
Dissertation topic: Dynamic Changes in Long-Term Memory Network Organization Underlie Systems Consolidation



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

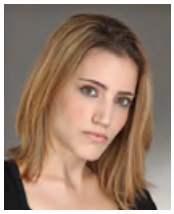
PhD student of **Prof. Meir Feder** and **Prof. Mark Shtaif**, School of Electrical Engineering, Tel Aviv University

Dissertation topic: Information Theory in Optical-Fiber Communictations

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 Ruppin**, 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, α-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

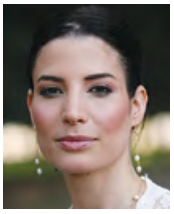
PhD student of **Prof. Jiwchar Ganor**, Department of Geological and Environmental Sciences,
Ben-Gurion University of the Negev

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

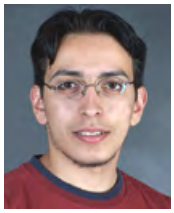
Dissertation topic: Optical Detection of Alzheimer's Disease Via Ocular Spectroscopy

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

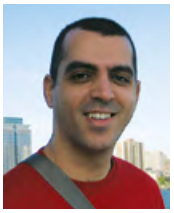
PhD student of **Prof. Haim Wolfson** and **Prof. Ruth Nussinov**, School of Computer Science, Tel Aviv University

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

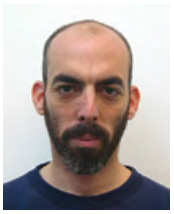
Dissertation topic: Combinatorial Construction of Probabilistic Proof Systems



Moshe Mishali

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

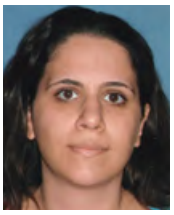
Dissertation topic: Compressive Processing of Analog Signals



Uri Roll

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

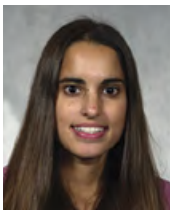
Dissertation topic: Spatial Perspectives of Epidemiological and Ecological Problems



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

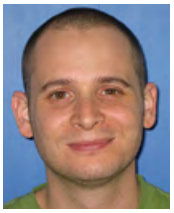
Dissertation topic: Guiding Principles for Sensory Substitution: From Vision to Touch

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

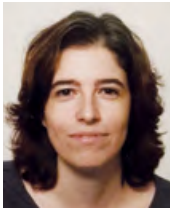
PhD student of **Prof. Eli Zeldov**, Faculty of Physics, Weizmann Institute of Science

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

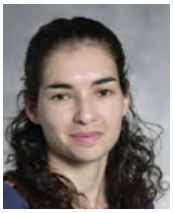
Dissertation topic: Metabolic Alterations in the Liver and Hepatitis B Virus Gene Expression

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 Shwartz

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

Dissertation topic: Nonlinear Optics in CZT:V

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The Israel Academy of Sciences and Humanities
P.O.Box 4040 Jerusalem 9104001 | Tel 972-2-5676207 | E-mail batsheva@academy.ac.il

www.adams.academy.ac.il