



## הפקולטה להנדסת אוירונאוטיקה וחלל

Dr. Igal Gluzman - Assistant Professor

ד"ר יגאל גלזמן – מרצה בכיר

Dr. Gluzman is interested in Fluid mechanics research. Current focus: transitional and turbulent boundary layers; stratified turbulence; cavitation and bubble dynamics.

Associate Professor Vitaly Shaferman

פרופסור חבר ויטלי שפרמן

Assoc. Professor Shaferman is interested in developing and analyzing novel autonomous Guidance, Navigation, and Control methodologies for aerospace vehicles, specifically optimal guidance, advanced estimators, and adaptive algorithms.

Professor Vassilios Theofilis

פרופסור וסיליס תאופיליס

Prof. Vassilios Theofilis' interests lie in the understanding, prediction and control of physical mechanisms underlying laminar flow linear and nonlinear instability & laminar-turbulent transition from the incompressible to the hypersonic regime.

## הפקולטה להנדסה אזרחית וסביבתית

Dr. Nicolo Pollini – Assistant Professor

ד"ר ניקולו פוליני – מרצה בכיר

Dr. Nicolo Pollini is the Principal Investigator of the Multidisciplinary Design Optimization (MDO) research group. The group works in a collaborative and inclusive manner to develop innovative solutions at the intersection of various disciplines. Their goal is to make significant contributions to the field of structural and multidisciplinary optimization, promoting a dynamic and intellectually stimulating research environment.

Dr. Lior Rubanenko – Assistant Professor

ד"ר ליאור רובנקו – מרצה בכיר

Dr. Lior Rubanenko is interested in planetary geophysics, mapping and geospatial analysis using machine and deep learning, thermal sensing of Earth, the Moon and the Terrestrial planets, and radiation transfer.



Associate Professor Sigal Kaplan

פרופסור חבר סיגל קפלן

Assoc. Professor Sigal Kaplan is interested in smart transportation systems, demand for innovative transport technologies, human-environment interactions, data-driven solutions to multi-modal, resilient, and safe systems, bounded rationality in transport behavior, public transport planning, and active travel and sustainable development.

**הפקולטה לארכיטקטורה ובינוי ערים**

Dr. Eliyahu Keller – Assistant Professor

ד"ר אלי קלר – מרצה בכיר

Dr. Keller's research explores the historical and theoretical connections between how architects create visions of the future and contemporaneous technological advancements, geopolitical developments, and large-scale threats and catastrophes.

**הפקולטה לביולוגיה**

Dr. Avner Wallach – Assistant Professor

ד"ר אבנר ולך – מרצה בכיר

Dr. Avner Wallach is studying how animals use their motor and sensory systems to generate internal brain models of their environment, and how these internal models guide the animal's autonomous behavior. This research is conducted using underwater brain recordings in freely swimming weakly electric fish.

Dr. Maya Maor-Nof – Assistant Professor

ד"ר מאיה מאור-נוף – מרצה בכירה

Dr. Maya Maor-Nof studies neuronal dysfunction and survival during development and during Neurodegeneration. Her lab will apply ATAC-seq (Assay for Transposase-Accessible Chromatin using sequencing) in primary neurons to analyze the transcriptomic and epigenomic landscape of neurodegeneration caused by pathogenic protein aggregation.



## הפקולטה להנדסה ביו-רפואית / הפקולטה להנדסת חשמל

Dr. Efrat Shimron – Assistant Professor

ד"ר אפרת שמרון – מרצה בכירה

Dr. Efrat Shimron's research focuses on developing computer-vision AI techniques for medical imaging, primarily MRI. She aims to increase the availability of safe (radiation-free) and fast scans for large populations by leveraging emerging technologies of low-cost, portable devices.

## הפקולטה להנדסה כימית

Dr. Dan Mendels - Assistant Professor

ד"ר דן מנדלס – מרצה בכיר

Dr. Dan Mendels's research focuses on developing and applying computational tools for understanding and designing molecular systems, e.g. drug and protein design, smart structural materials, polymer design, solar cells, and batteries.

Dr. Lucy Liberman – Assistant Professor

ד"ר לואי ליברמן – מרצה בכירה

Dr. Lucy Liberman's research focuses on developing and understanding polysaccharide-based systems, e.g.: Polysaccharides dissolved in ionic liquids, polysaccharide-based block-copolymers. Characterization of these systems will be mainly based on SAXS and cryo-electron-microscopy.

## הפקולטה לכימיה

Dr. Nir Hananya – Assistant Professor

ד"ר ניר חנניה – מרצה בכיר

The Hananya lab is developing chemistry-driven tools to investigate cell biology: He uses in vivo photochemistry to map protein-protein interactions and utilize designer chromatin to study epigenetics.

Dr. Ori Green – Assistant Professor

ד"ר אורי גרין – מרצה בכיר

Dr. Ori Green's research is at the interface between chemistry and biology. He develops chemical reactions and molecular tools to advance molecular imaging and drug discovery.



## הפקולטה לחינוך, למדע וטכנולוגיה

### Professor Miri Yemini

פרופסור מירי ימיני

Prof. Yemini's research focuses on global citizenship education, youth activism, inequality in education and place-based education.

### Dr. Areej Maeasi - Lecturer

ד"ר אריג' מואסי – מרצה

Dr. Mawasi studies diverse learner engagement in STEM environments mediated by technologies (e.g., AI) with a focus on critical and ethical inquiry of technology in society.

## הפקולטה להנדסת חשמל

### Dr. Uzi Pereg – Assistant Professor

ד"ר עוזי פרג – מרצה בכיר

Dr. Uzi Pereg's research field is quantum communication and information theory with a focus on quantum Shannon theory, analyzing the optimal tradeoff between communication resources, such as quantum entanglement, throughput, and privacy.

### Dr. Pavel Sidorenko – Assistant Professor

ד"ר פבל סידורנקו – מרצה בכיר

Dr. Pavel Sidorenko's research focuses on nonlinear wave phenomena in optical fibers. He develops fiber lasers that generate ultrashort light pulses and investigates nonlinear wave propagation in fibers.

### Dr. Haggai Maron – Assistant Professor

ד"ר חגי מרון – מרצה בכיר

Dr. Haggai Maron's primary research interest is in deep learning for structured data. Applying deep learning to sets, graphs, and other objects with symmetries.

## המחלקה ללימודים הומניסטיים

### Dr. Enrico Piergiacomi – Assistant Professor

ד"ר אנריקו פירג'יאקומי – מרצה בכיר

Dr. Enrico Piergiacomi focuses on the history of ancient atomism and its impact on the later theories of nature, particularly those of the 14th-17th centuries.



## הפקולטה למדעי המחשב

Dr. David Wajc – Assistant Professor

ד"ר דוד וייץ – מרצה בכיר

Dr. David Wajc studies algorithms, especially for massive evolving data, including online, dynamic, and streaming models of computation.

Dr. Or Litany – Assistant Professor

ד"ר אור ליטני – מרצה בכיר

Specializing in artificial intelligence (AI) for computer vision, Dr. Or Litany's work emphasizes the generation, reconstruction, and semantic interpretation of dynamic 3D digital environments.

Dr. Nadav Amit - Assistant Professor

ד"ר נדב עמית – מרצה בכיר

Dr. Nadav Amit is interested in operating systems, computer architecture, virtualization, memory management and security.

Dr. Brit Youngman - Assistant Professor

ד"ר ברית יונגמן – מרצה בכירה

Dr. Brit Youngman's research goal is to assist analysts to gain reliable and trustworthy insights from their data. This is done by leveraging causal inference techniques with data management methodologies.

## הפקולטה למתמטיקה

Dr. Amir Sagiv – Assistant Professor

ד"ר אמיר שגיב – מרצה בכיר

Dr. Amir Sagiv's research focuses on differential equations, and what they teach us about the mathematical foundations of quantum mechanics and photonics. Dr. Sagiv is also interested in measure transport theory and its applications to algorithms and uncertainty quantification.

Professor Gilad Gour

פרופסור גלעד גור

Prof. Gilad Gour is interested in the mathematical foundations of quantum information science, including resource theories, communication, Shannon theory, entanglement, thermodynamics, and the foundations of quantum science.



## הפקולטה למדעי הנתונים והחלטות

Dr. Allon Vishkin – Assistant Professor

ד"ר אלון וישקין – מרצה בכיר

Dr. Allon Vishkin is a cultural psychologist. His research investigates cultural differences in emotion, motivation, and social norms, typically with large cross-national datasets.

Dr. Gal Mendelson – Assistant Professor

ד"ר גל מנדלסון – מרצה בכיר

Dr. Gal Mendelson uses mathematical modeling and algorithmic design to study Operations Research problems where decision-makers interact with stochastic environments whose underlying distributions change with time.

## הפקולטה להנדסת מכונות

Dr. Evgeniy Boyko – Assistant Professor

ד"ר יבגני בויקו – מרצה בכיר

Dr. Evgeniy Boyko's research focuses on a fundamental understanding of fluid mechanics and transport phenomena involving complex, non-Newtonian fluids using theoretical modeling, simulations, and comparison to experiments.

Dr. Leeya Engel – Assistant Professor

ד"ר ליה אנגל – מרצה בכירה

Dr. Engel's lab develops bio-microsystems and cryo-electron microscopy methods to study how physical signals from the cellular microenvironment influence cellular ultrastructure.

Dr. Nili Krausz – Assistant Professor

ד"ר נילי קרויס – מרצה בכירה

Dr. Nili Krausz's research is focused on developing more intelligent, robust, and user-friendly powered prosthetic legs and arms, using insights from robotics and neural control of movement.

Associate Professor Morel Groper

פרופסור חבר מורל גרופר

Assoc. Professor Morel Groper's research explores tribological considerations to enhance the mechanical design of propulsion systems and components for marine platforms, leveraging a fundamental understanding of friction, wear, and lubrication in harsh marine environments.



## הפקולטה לפיסיקה

Dr. Shmuel Bialy – Assistant Professor

ד"ר שמואל ביאלי – מרצה בכיר

Dr. Bialy and his research group are investigating the process of star formation in galaxies, as well as their interaction with the gas nebulae that give rise to them. Additionally, they are researching the evolution of these gas nebulae throughout cosmic history, from very ancient epochs (about 13 billion years ago) to the present day.

Dr. Ben Ohayon – Assistant Professor

ד"ר בן אוחיון – מרצה בכיר

Dr. Ben Ohayon does experimental physics in the field of exotic atoms; coulomb bound states with exotic particles (muons, antiprotons, etc.).

Dr. Ilya Svetlizky – Assistant Professor

ד"ר איליה סבטליצקי – מרצה בכיר

Dr. Svetlizky's research focuses on the intersection of experimental soft matter physics and materials physics. Examples of the problems he is investigating include how friction initiates, how materials fracture, and how crystals flow.

Dr. Ido Schwartz – Assistant Professor

ד"ר עידו שוורץ – מרצה בכיר

Dr. Ido Schwartz is interested in Quantum optics using single photon emitters and optical and electronic properties of atomically thin two-dimensional materials.

Dr. Ram Adar – Assistant Professor

ד"ר רם מיכאל אדר – מרצה בכיר

Dr. Adar specializes in theoretical biophysics. He explains biological processes from a physical perspective and discovers new physical effects in biological systems. His primary focus is on multicellular migration.



## הפקולטה לרפואה

Dr. Boris Slobodin – Assistant Professor

ד"ר בוריס סלובודין – מרצה בכיר

Dr. Boris Slobodin's lab investigates mRNA dynamics in stress, aging, and chemotherapy treatments to provide novel molecular insights into cellular response to these conditions.

Dr. Stefano Recanatesi – Assistant Professor

ד"ר סטפנו רקנטסי – מרצה בכיר

Neuro-AI lab: understanding neural representations of biological and artificial networks.

Dr. Hadas Benisty – Assistant Professor

ד"ר הדס בן איסטי – מרצה בכירה

Dr. Hadas Benisty's research focuses on formulating interpretable models for brain activity and behavior to understand the underlying mechanisms driving network dynamics during learning and degenerative conditions.

Dr. Ari Glasner – Assistant Professor

ד"ר ארי גלזנר – מרצה בכירה

Dr. Ari Glasner's lab studies innate and adaptive host immune cell biology, function, and communication in homeostatic as well as in pathological conditions such as in the Tumor Microenvironment (TME).

## TCE מרכז

Dr. Naama Ben-David – Assistant Professor

ד"ר נעמה בן-דוד – מרצה בכירה

Dr. Naama Ben-David works in the intersection of theory and practice of concurrent and distributed computing.

## מכון ג'ייקובס

Dr. Udit Gupta – Lecturer

ד"ר אודית גופתה – מרצה

Dr. Udit Gupta's research lies at the intersection of computer architecture, systems for machine learning, and sustainable computing. It focuses on design of systems and hardware to improve performance, efficiency and sustainability of platforms and applications.