

## The Technion ERC Team

FP7 Funded ERC Proposals

**Erc** - Starting Grants



Assoc. Prof. Aharon Blank
Faculty of Chemistry

THE MR CHALLENGE - Expanding the horizons of magnetic resonance in sensitivity, imaging resolution, and availability



Assoc. Prof. Eldar Fischer
Faculty of Computer Science
PROPERTY TESTING - Property testing and
sublinear algorithms for languages and
combinatorial properties



Asst. Prof. Kinneret Keren
Faculty of Physics

BIOSELFORGANIZATION - Biophysical aspects
of self-organization in actin-based cell
motility



Assoc. Prof. Isaac Keslass
Faculty of Electrical Engineering

GNOC - Towards a Gaussian

Network-on-Chip



Assoc. Prof. Avner Rothschild

Faculty of Materials Science and Engineering

ETASECS - Extremely Thin Absorbers for Solar

Energy Conversion and Storage



erc

SSOC. Prof. Eran Yaha Faculty of Computer Science PRIME - Programming with Millions of Examples



Assoc. Prof. Debbie Lindell Faculty of Biology PIMCYV - Physiological Interactions between Marine Cyanobacteria and their Viruses



Prof. Shahar Mendelson
Faculty of Mathematics

AGALT - Asymptotic Geometric Analysis and
Learning Theory



Assoc. Prof. Shy Shoham Faculty of Biomedical Engineering OPTISTIM - Patterned optical activation of retinal ganglion cells



Assoc. Prof. Eli Ben-Sasso
Faculty of Computer Science
PAC - Proofs and Computation



**Erc** - Advanced Grants



(Moti) Segev
Faculty of Physics

NMNP - Nonlinear Micro and Nano-Photonics:
nonlinear optics at the micrometer scale and below



Prof. Ron Kimmel
Faculty of Computer Science
NORDIA - Non-Rigid Shape Reconstruction
and Deformation Analysis



Assoc. Prof. Dvir Yelin
Faculty of Biomedical Engineering
MINT - Multiphoton Ionization Nano-Therapy



Prof. Lior Gepstein
Faculty of Medicine

CARDIO-IPS - Induced Pluripotent stem Cells:
A Novel Strategy to Study Inherited Cardiac
Disorders



Prof. Hossam Haick
Faculty of Chemical Engineering
DIAG-CANCER - Diagnosis, Screening and
Monitoring of Cancer Diseases via Exhaled
Breath Using an Array of Nanosensors



Prof. Yuval Ishai
Faculty of Computer Science
CAC - Cryptography and Complexity



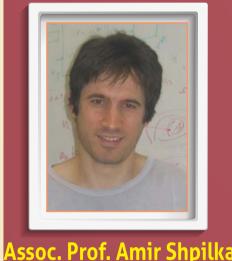
Prof. Benjamin
Podbilewicz
Faculty of Biology
ELEGANSFUSION-1 - Mechanisms of Cell
Fusion in Eukaryotes



Prof. Robert J. Adler
Faculty of Electrical Engineering
URSAT - Understanding Random Systems via
Algebraic Topology



Assoc. Prof. Yuval Shaked
Faculty of Medicine
HOSTRESPONSE - Host molecular and cellular
responses to anti-cancer drug treatment as a
potential biomarker for treatment



Faculty of Computer Science

LBITAC - Lower Bounds and Identity Testing for

Arithmetic Circuits



Assoc. Prof. Pini Gurfil Faculty of Aerospace Engineering

FADER - Flight Algorithms for Disaggregated

Space Architectures



Prof. Roy Kishony
Faculty of Biology
ARISE - The Ecology of Antibiotic Resistance



Assoc. Prof. Shulamit
Levenberg
Faculty of Biomedical Engineering
ENGVASC - Engineering Vascularized Tissues
Arithmetic Circuits



Asst. Prof. Gil
Alexandrowicz
Faculty of Chemistry
Magnetic Beams - Magnetically manipulated
molecular beams; a novel ultra-sensitive approach for
studying the structure and dynamics of water surfaces



Assoc. Prof. Uri Bader
Faculty of Mathematics

UB12 - Ergodic Group Theory



Prof. Shie Mannor
Faculty of Electrical Engineering
SUPREL - Scaling Up Reinforcement Learning:
Structure Learning, Skill Acquisition, and
Reward Shaping



Prof. Oded Beja

Faculty of Biology

PHOTOPHAGE - The role of viral photosynthetic proteins in oceanic

photosynthesis

Prof. Yehuda Kalay
Faculty of Architecture & Town
Planning
NextGenBim - Next-Generation Building
Information Modeling to Support Evaluation
of Human Behavior in Built Environments



**Prof. Michael Elad** 

Faculty of Computer Science

Prof. Ilan Marek
Faculty of Chemistry

CMeTC - Selective Carbon-Carbon Bond
Activation: A Wellspring of Untapped
Reactivity



Assoc. Prof. Itai Yanai
Faculty of Biology
EvoDevoPathways - The Evolution of
Developmental Gene Pathways



Assoc. Prof. Elad Hazan
Faculty of Industrial Engineering &
Management
SUBLRN - Information-optimal machine



Asst. Prof. Boaz Pokroy
Faculty of Materials Science and
Engineering

BIONICS - Bio-Inspired Routes for Controlling
the Structure and Properties of Materials:
Reusing proven tricks on new materials

