PREVIOUS WINNERS

2016 **PROF. NATHALIE Q. BALABAN**
Racah Institute of Physics, Faculty of Science
Biological Physics of Self-Replication

2015 **PROF. RE'EM SARI**
Racah Institute of Physics, Faculty of Science
Understanding Our Universe

2014 **PROF. MICHAL BIRAN**
Departments of Asian Studies, and Islamic and Middle Eastern Studies, Institute of Asian and African Studies, Faculty of Humanities
Inner Asian History: Mobility Empire and Cross-Cultural Contacts in Mongol Eurasia

2013 **PROF. ROI BAER**
Institute of Chemistry and Fritz Haber Minerva Research Center for Molecular Dynamics, Faculty of Science
Developing New Theoretical and Computational Techniques that Enable Determination of the Energy Levels of Charge Carriers in Large Molecular Systems and Nanocrystals

2012 **DR. ERAN MESHORER**
Department of Genetics, Silberman Institute of Life Sciences, Faculty of Science
Using Genome-Wide Approaches and Sophisticated Imaging Techniques to Understand Genome Plasticity in Stem Cells

2011 **PROF. DAVID WEISBURD**
Institute of Criminology, Faculty of Law
Pioneering Research on White Collar Crime, Policing, and Crime Prevention

2010 **PROF. MERAV AHISSAR**
Department of Psychology and Program in Cognitive Sciences, Faculty of Social Sciences
The Neuro-Cognitive Basis of Reading Disability - The "Anchoring-Deficit" Hypothesis

2009 **PROF. ISAIAH TUVIA (SHY) ARKIN**
Department of Biological Chemistry, Silberman Institute of Life Sciences, Faculty of Science
Structural Biology of Membrane Proteins, Focusing on Pathogen's Ion Channels and Ion Pumps

2008 **PROF. URI BANIN**
Institute of Chemistry and the Center for Nanoscience & Nanotechnology, Faculty of Science
Major Advancements in the Science and Technology of Nanocrystals and the Development of Hybrid Multifunctional Nanoparticles

2007 **PROF. HOWARD (CHAIM) CEDAR**
Department of Developmental Biology and Cancer Research, Institute for Medical Research Israel-Canada, Faculty of Medicine
Establishing the Cornerstone of Epigenetics and Its Role in Human Development

The Hebrew University of Jerusalem
The Authority for Research and Development
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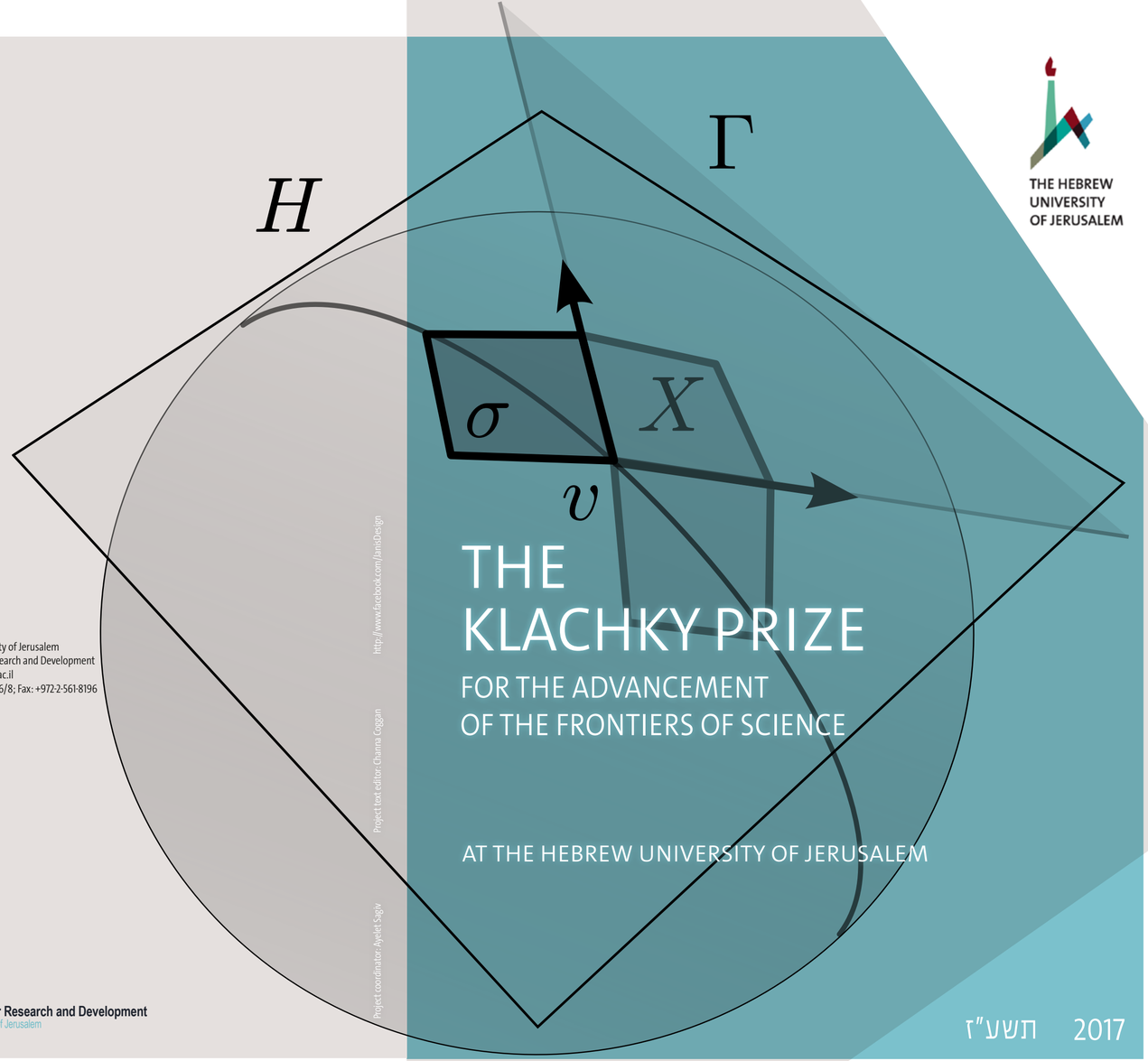


THE HEBREW UNIVERSITY OF JERUSALEM

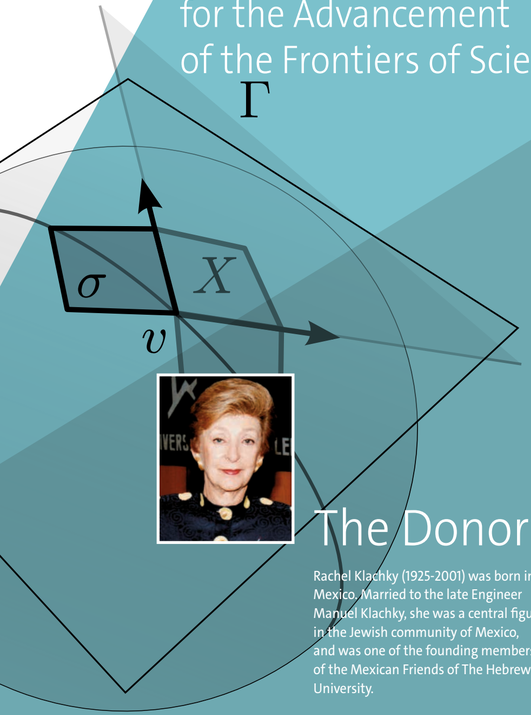
THE KLACHKY PRIZE

FOR THE ADVANCEMENT OF THE FRONTIERS OF SCIENCE

AT THE HEBREW UNIVERSITY OF JERUSALEM

תשע"ז 2017

KLACHKY PRIZE
for the Advancement of the Frontiers of Science



The Klachky Prize for the Advancement of the Frontiers of Science is an annual prize founded by the late Ms. Rachel Klachky. The prize is given to Hebrew University faculty members or academic units for their achievements in:

The Advancement of Science

The Advancement of Scientific Research

The Advancement of Scientific Knowledge

The Advancement of the Frontiers of Science

New Academic Developments

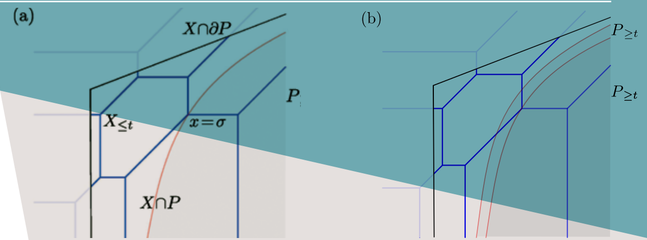
Academic Ventures

The Donor

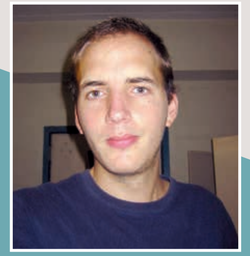
Rachel Klachky (1925-2001) was born in Mexico. Married to the late Engineer Manuel Klachky, she was a central figure in the Jewish community of Mexico, and was one of the founding members of the Mexican Friends of The Hebrew University.

In 1997, she received an Honorary Fellowship from The Hebrew University for her outstanding contributions to the State of Israel and The Hebrew University of Jerusalem. She wholeheartedly supported worthy causes, including the absorption of new immigrants, scholarships for students, and support of various scientific research projects, and studies on superconductivity at The Hebrew University.

After she passed away, her sons, Roberto and Leopoldo, continued her legacy of support to The Hebrew University of Jerusalem. The Klachky Prize has been awarded since 2003.



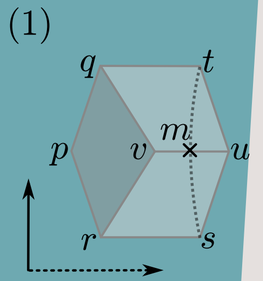
The Klachky Prize for 2017

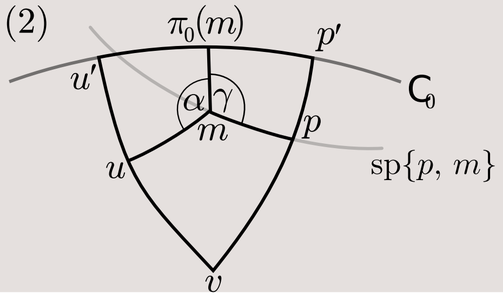


DR. KARIM ADIPRASITO

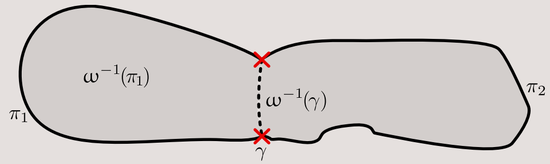
Einstein Institute of Mathematics
Faculty of Science

Karim Adiprasito is German by nationality. He owes his name to an Indonesian grandfather who came to Germany as an engineer and first introduced young Karim to mathematics through asking him mathematical riddles every time he visited. Adiprasito earned his Ph.D. in differential geometry and combinatorics in 2013 at Freie Universitäet Berlin in Germany with Guenter Ziegler. Subsequently, he undertook post-doctorate work at the Institute des Hautes Études Scientifiques (IHES) near Paris and the Institute for Advanced Study (IAS) at Princeton before joining The Hebrew University.





Interplay between Combinatorial and Continuous Structures in Mathematics



As a researcher, Karim Adiprasito is fascinated by connections between different areas of mathematics, in particular the interplay between combinatorial (or discrete) and continuous structures. An important instance of such a phenomenon is the Maxwell-Cremona correspondence, which goes back to late Renaissance study of statics in architecture. He used this technique to study (discrete) partial differential relations which govern, for instance, the behavior of flowing water or electromagnetic fields to solve a problem going back to Legendre more than 200 years ago. Furthermore, he used this technique to describe combinatorially how algebraic objects intersect, which led to the solution to a famous conjecture of Rota. Currently, he is working with a student to analyze algorithms in scientific computing using their symmetries and attempting to understand extremal properties of certain algebraic objects.