הרצאה לזכרו של
פרופסור יהודה אייזנברג ז"ל

דברי פתיחה:
פרופ' מארק קרלינר

הענקת מלגת הצטיינות לזכרו של
פרופסור יהודה אייזנברג ז"ל
למר ארז כהן - תלמיד לתואר שלישי

**Professor Judah M. Eisenberg
Memorial Lecture**

Introductory Remarks:
Prof. Marek Karliner

Presentation of the Judah Eisenberg Award
for academic achievement
to Mr Erez Cohen – Ph.D. Student

פרופסור ג'נט קונרד

המחלקה לפיזיקה, המכון הטכנולוגי של מסצ'וסטס, ארה"ב

Professor Janet Conrad

**Department of Physics
Massachusetts Institute of Technology, USA**

Lecture | הרצאה

A DEEP DIVE INTO NEUTRINO WAVES

Abstract

Our Standard Model of Particle Physics is a highly successful, self-consistent description of the properties and interactions of particles. Nevertheless, it is only a model and not a theory, because of the large number of arbitrary inputs. As a result of this, and other peculiar features of the "Standard Model Picture," physicists think that there must be some larger theory, of which the Standard Model is a part. This leads us to be on the constant look out for Beyond Standard Model effects. The first Standard Model particles that have demonstrated unexpected behavior are the neutrinos. They have exhibited a quantum mechanical effect known as oscillations. Once you have seen one unexpected effect, it only makes sense to look for more! And it is turning out that the neutrino oscillation waves are are rich environment for our search. This talk will review neutrino oscillations, discuss present puzzles, and consider the future of neutrino oscillation physics.

The lecture will take place on Sunday,
11 June 2017, at 14:00, in Melamed
Hall (6), Shenkar Physics Building,
Tel Aviv University, Ramat Aviv

ההרצאה תתקיים ביום ראשון,
11 ביוני 2017, בשעה 14:00,
באולם מלמד (6), בניין שנקר לפיזיקה,
אוניברסיטת תל אביב, רמת אביב

Light refreshments will be served before the lecture | כיבוד קל יוגש לפני ההרצאה