

## סמינר SEMINAR

### **The Technion's Ultrafast Transmission Electron Microscope: Probing Extreme Light-Matter Interactions**

Prof. Ido Kaminer

Electrical Engineering

Technion

The talk will describe the unique capabilities and exciting prospects of the ultrafast transmission electron microscope, which is being built at the Technion's microscopy center.

The ultrafast transmission electron microscope combines the imaging capabilities of transition electron microscopes with the time resolution of femtosecond lasers. The system excites the sample by a femtosecond pulse simultaneously with the arrival of a probing ultrashort electron pulse triggered by another femtosecond pulse, enabling time-correlated measurements and ultrafast strong-field interactions.

We will discuss new science and applications enabled by such ultrafast interactions, including new principles for generating extreme ultraviolet and x-ray radiation, as well as extreme light-matter interactions in nanostructures and in 2D materials.

**Host: Prof. Yachin Ivry**

ההרצאה תתקיים ביום חמישי, ה-1 בפברואר 2018 בשעה 14:30  
באודיטוריום ע"ש דיוויד וואנג, קומה 3, בנין דליה מידן

**The lecture will take place on Thursday, February 1st, 2018 at 14:30  
David Wang Auditorium, 3<sup>rd</sup> floor Dalia Maydan Bldg.**

**כיבוד קל יוגש לאחר הסמינר**