



Solid State Institute
המכון למצב מוצק

TECHNION
Israel Institute
of Technology



הטכניון
מכון טכנולוגי
לישראל

SPECIAL SEMINAR

סמינר מיוחד

Strong-field Physics at Australian Attosecond Science Facility

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Abstract

I will present a short overview of research conducted at Australian Attosecond Science Facility at Griffith University in Brisbane, Australia, emphasising our particular strengths in precision measurements on atomic and molecular hydrogen applied to benchmarking and validating theoretical models. Then I will describe in more detail two of our recent experiments. Firstly, I will show how we observed electron localisation in a dissociating hydrogen molecular ion in real time and determined that electron becomes localised on one of the two protons in just 15 fs. Secondly, I will talk about time-resolved Coulomb explosion imaging of ultrafast molecular dynamics in acetylene (C_2H_2), where we observed vibrational modulation of dissociation probabilities as well as a clear signature of enhanced ionization at critical distance.

ההרצאה תתקיים ביום ראשון, ה-3.2.19 בשעה 11:00*
באודיטוריום המכון למצב מוצק, קומת כניסה

The lecture will take place on Sunday, 3.2.19 at 11:00*
at the Solid State Institute auditorium, entrance floor

***Refreshment: after the seminar, at 12:10.**

Host: Associate Professor Oren Cohen