Solid State Institute
המכון למצב מוצק

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SEMINAR **סמינר**

Bi-Elliptical High-Harmonic Spectroscopy

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Abstract

High-harmonic spectroscopy is an important method for investigating ultrafast nonlinear atom-laser interactions. In order to successfully interpret spectroscopic measurements, it is desirable to have a direct mapping between the measured observables and the quantities of interest (preferably an analytical formula).

In this talk, I will present two new high harmonic spectroscopy methods. First, an attosecond-resolved spectroscopic technique that is based on ellipticity-resolved high harmonic generation. In this scheme, the polarization properties of the harmonic radiation are directly mapped to various properties of the attosecond pulse trains that are emitted during high harmonic generation. Theoretical and experimental results will be presented. Second, intensity-resolved spectroscopic technique, where high harmonic generation from noble gases is analyzed over the full range of pump ellipticities. Here, the generation process is sensitive to the effective potential structure and to the valance-orbital width of noble gas atoms.

ההרצאה תתקיים ביום רביעי, ה-10.4.19 בשעה 13:00!
באודיטוריום המכון למצב מוצק, קומת כניסה
The lecture will take place on Wednesday, 10.4.19 at 13:00!
at the Solid State Institute auditorium, entrance floor

Ph.D. student of Associate Professor Oren Cohen