



Solid State Institute  
המכון למצב מוצק

TECHNION  
Israel Institute  
of Technology



הטכניון  
מכון טכנולוגי  
לישראל

**SPECIAL SEMINAR**

**סמינר מיוחד**

## **"Dark Continuum in the Spectral Function of the Resonant Fermi Poltloon"**

*Dr. Olga Goulko*

*Department of Physics,  
University of Massachusetts, Amherst,  
U.S.A.*

### Abstract

I will present controlled numerical results for the ground state spectral function of the resonant Fermi polaron in three dimensions and discuss the existence of a "dark continuum" -- a region of anomalously low spectral weight between the narrow polaron peak and the broad spectral continuum maximum at positive energy. Surprisingly, the dark continuum develops when the s-wave scattering length is of the order of the inverse Fermi wavevector, i.e. in the absence of a small interaction-related parameter.

**ההרצאה תתקיים ביום חמישי, ה-21.4.16 בשעה 14:30**

**בבניין המכון למצב מוצק, בחדר הסמינרים.**

**The lecture will take place on Thursday, 21.4.16 at 14:30  
at the seminar room of the Solid State Institute.**

**Host: Assistant Professor Yoav Sagi**