

**Condensed Matter Theory Center Seminar**  
**Friday, May 9 at 11:00 am**  
**2205 Physics Building**

**Speaker: Vadim Oganesyan (City University of New York)**

**Title: Aspects of Many-Body Localization**

**Abstract:**

Many-body localization is absence of transport in interacting many-body systems prepared with finite entropy per particle. This behavior is necessarily separated from conventional diffusion by a dynamical finite temperature transition. Many-body localized systems can retain detailed memories of initial conditions and therefore violate thermalization hypothesis underlying standard statistical mechanics description of interacting systems. This talk will survey recent progress, both theoretical and experimental, in realizing and understanding many-body localization.

**Host: Kostyantyn Kechedzhi**

<http://www.physics.umd.edu/cmtc/seminars.html>