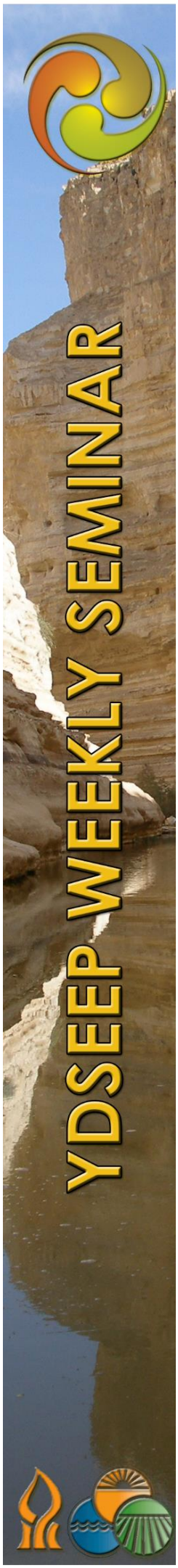

Ben-Gurion University of the Negev
Blaustein Institutes for Desert Research
The Swiss Institute for Dryland Environmental and Energy Research
Alexandre Yersin Department of Solar Energy and Environmental Physics

Training, Memory and Universal Scaling in Amorphous Frictional Granular Matter

Itamar Procaccia
Department of Chemical Physics
Weizmann Inst.

Abstract

Dr. Procaccia will report a joint experimental and theoretical investigation of cyclic training of amorphous frictional granular assemblies, with special attention to memory formation and retention. Measures of dissipation and compactification are introduced, culminating with a proposed scaling law for the reducing dissipation and increasing memory. This scaling law is expected to be universal, insensitive to the details of the elastic and frictional interactions between the granules.

Date & Location:

Tuesday, March 20, 2018, 11:00
Lecture room, Physics Building (ground floor)