

**The Weizmann Institute of Science  
Faculty of Mathematics and Computer Science**

**Geometric Functional Analysis and Probability Seminar**

Room 155, Ziskind Building  
on Thursday, Jan 09, 2025  
at 13:30

**Snir Ben Ovadia**  
PSU

will speak on

**Physical Measures for Smooth Dynamical Systems**

**Abstract:**

Given a dynamical system which admits chaos, its possible equilibria are studied through the collection of its invariant measures (i.e the probability of an event does not change under time-evolution). This collection may be very large, and we often wish to single out measures of importance. In particular, physical measures are a sought-after object, as they describe an observable equilibrium. In this talk we will define what are physical measures (in a broad sense, including SRB measure), and list a few recent results and open questions regarding their existence for smooth dynamical systems. In particular, finding "testable" conditions for the existence of physical measures is an on-going and active field of research.