

Department of Mathematics, BGU

Colloquium

On Tuesday, December ,31 2024

At 14:30 – 15:30

In Math 101-

Snir Ben Ovadia (Penn State University)

will talk about

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 change under the 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.