Department of Mathematics, BGU

Colloquium

On *Tuesday, November ,22 2016*

At *14:30 – 15:30*

In *Math 101-*

Tali Pinsky (TIFR, India)

will talk about

Could the Lorenz flow be hyperbolic?

Abstract: I will describe the theory of hyperbolic flows on three manfiolds, and then describe a new approach to chaotic flows using knot theory, allowing for topological analysis of singular flows. I'll use this to show that, surprisingly, the famous Lorenz flow on R^3 can be related to the geodesic flow on the modular surface. When changing the parameters, we also find a new type of topological phases in the Lorenz system. This will be an introductory talk.