Department of Mathematics, BGU

Colloquium

On *Dec ,13 2022*

At *14:30 – 15:30*

In *Math 101-*

Chaim Even Zohar (Technion)

will talk about

Random Manfiolds and Knots

Abstract: We introduce a combinatorial method of generating random submanfiolds of a given manfiold in all dimensions and codimensions. The method is based on associating random colors to vertices, as in recent work by Sheffield and Yadin on curves in 3-space. We determine conditions on which submanifolds can arise in which ambient manfiolds, and study the properties of random submanfiolds that typically arise. In particular, we investigate the knotting of random curves in 3-manfiolds, and discuss some other applications.

Joint work with Joel Hass