

Department of Mathematics, BGU

Colloquium

On *Tuesday, December 13 2022*

At *14:30 – 15:30*

In *Math 101-*

Chaim Even Zohar (Technion)

will talk about

Random Manifolds and Knots

Abstract: We introduce a combinatorial method of generating random submanifolds of a given manifold 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 manifolds, and study the properties of random submanifolds that typically arise. In particular, we investigate the knotting of random curves in 3-manifolds, and discuss some other applications.

Joint work with Joel Hass