

Department of Mathematics, BGU

Colloquium

On Tuesday, November 9, 2021

At 14:30 – 15:30

In Math 101-

Yotam Smilansky (Rutgers University)

will talk about

Order and disorder in multiscale substitution tilings

Abstract: The study of aperiodic order and mathematical models of quasicrystals is concerned with ways in which disordered structures can nevertheless manifest aspects of order. In the talk I will describe examples such as the aperiodic Penrose and pinwheel tilings, together with several geometric, functional, dynamical and spectral properties that enable us to measure how far such constructions are from demonstrating lattice-like behavior. A particular focus will be given to new results on multiscale substitution tilings, a class of tilings that was recently introduced jointly with Yaar Solomon.