

Department of Mathematics, BGU

Operator Algebras Seminar

On Wednesday, November 19, 2025

At 13:00 – 14:00

In 201

Mansi Suryawanshi (Technion)

will talk about

Representations of the Odometer Semigroup: Dilation and Subrepresentations

Abstract: Given a natural number $n \geq 1$ the odometer semigroup O_n , also known as the adding machine or the Baumslag–Solitar monoid with two generators, is a well-known object in group theory. This talk will examine the odometer semigroup in relation to representations of bounded linear operators. We will focus on noncommutative operators and show that contractive representations of O_n always admit nicer representations. A complete description of representations of O_n on the Fock space will be presented, along with connections to odometer lifting and subrepresentations. Along the way, we will also classify Nica–covariant representations of O_n .