

Department of Mathematics, BGU

BGU Probability and Ergodic Theory (PET) seminar

On Tuesday, March ,27 2018

At 11:10 – 12:00

In 201

Jeremias Epperlein (BGU)

will talk about

Derivative Algebras and Topological Conjugacies Between Cellular Automata

Abstract: Topological conjugacy is most probably the most natural notion of isomorphism for topological dynamical systems. Classifying subshifts of finite type up to topological conjugacy is a notoriously hard problem with a long history of results. Much less is known about the corresponding problem for endomorphisms of subshifts of finite type (aka cellular automata). I will discuss necessary and sufficient criteria under which periodic cellular automata are topologically conjugate. The main tool will be derivative algebras in the sense of Tarski and McKinsey, an algebraic structure based on the Cantor-Bendixson derivative.

Please Note the Unusual Time!