



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Seminar in Geometry and Topology

Room 1 ,Ziskind Building  
on Tuesday, Feb 05, 2019  
at 16:15

Solomon (Soli) Vishkautsan  
Tel Hai College

The field of definition of the iterates of a rational function

Abstract:

We will discuss the field of definition of a rational function and in what ways it can change under iteration, in particular when the degree over the base field drops. We present two families of rational functions with the property above, and prove that in the special case of polynomials, only one of these families is possible. We also explain how this relates to Ritt's decomposition theorem on polynomials. Joint work with Francesco Veneziano (SNS Pisa).