

Department of Mathematics

University of Houston

Analysis Seminar

FRIDAY, February 23, 2018

13:00-14:00 – Room 646 PGH

Speaker: Milivoje Lukic (Rice University)

Title: Transport in XY spin chains, via Jacobi matrices

Abstract: Dynamical properties of spin chains are usually expressed in terms of Lieb-Robinson bounds. While general ballistic upper bounds are known in great generality, for the XY spin chain, finer properties can be derived from transport properties of an associated Jacobi matrix. In this talk, I will describe joint works with Damanik and Yessen, and with Damanik, Lemm, and Yessen, in which we prove ballistic transport for periodic XY spin chains and anomalous transport in the Fibonacci XY spin chain.