

GRADUATE STUDENT SEMINAR

Guest Speaker: Jeff Diller

University of Notre Dame

Date: Thursday, March 3, 2022

Time: 2:00 PM

Location: 125 Hayes-Healy Hall

Zoom URL: notredame.zoom.us/j/93888654312



Lecture Title:

Dynamics of rational maps: a best case example and reasonable hopes

Abstract

A map $f : \mathbb{C}^n \rightarrow \mathbb{C}^n$ is rational if its component functions are themselves rational. A result of Gromov from the 70s suggests that the complexity of the dynamics (i.e. behavior of iterates) of f should be closely tied to the way the degrees of the components grow under iteration. I'll lead with a particularly good example of this connection, present Gromov's result and, time permitting, say some things about the proof and a program for further understanding the dynamics of a rational map.