Speaker: Jeff Diller
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Date: Thursday, September 5, 2019
Time: 2:00 PM
Location: 258 Hurley Hall

Lecture Title:
A transcendental first dynamical degree

Abstract
Any plane rational self-map $f : P^2 \rightarrow P^2$ has an 'algebraic degree' defined to be the common degrees of its components in homogeneous coordinates. The sequence $(deg f^n)$ always grows like a power $\lambda^n$ of some number $\lambda \geq 1$, the 'dynamical degree' of $f$, which is a fundamental invariant for the dynamics of $f$. The dynamical degree is typically equal to the degree of $f$, and there are only countably many possibilities for its value in general. Nevertheless, I will describe a specific example in which the first dynamical degree turns out to be (provably) a transcendental number.