RUTGERS
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Department of Mathematics and Computer Science

Colloquium

Degree of curves and measures of irrationality

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Abstract:

Curves are fundamental objects that govern geometry of an algebraic variety. In this talk, I will explore how, for a general complete intersection X of sufficiently large degree, there are no curves on X with degree smaller than that of X. This result shows evidence for a higher-dimensional Noether-Lefschetz theorem. I will also discuss an interesting application: how these can be used to measure the irrationality of complete intersections, which verifies a conjecture of Bastianelli–De Poi–Ein–Lazarsfeld–Ullery.

4 – 5pm
Wednesday, October 30, 2024
Room 204, Smith Hall