Logic Seminar

UNIVERSITY OF NOTRE DAME
Department of Mathematics

Speaker: Natasha Dobrinen
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Tuesday, September 4, 2018
2:00 PM
125 Hayes-Healy Hall

Title: Logic, Ramsey Theory, and Homogeneous Structures

Abstract:

Ramsey theory was discovered en route to solving Hilbert's Entscheidungsproblem on formal logic. Since then, logic and Ramsey theory have fueled each other to new discoveries. In this talk we will touch on the connections between logic and Ramsey theory of infinite, finitely branching trees. Bringing set theory into the equation allows for insightful methods to prove Ramsey theorems on trees which can be applied to homogeneous structures. In particular, we will include some recent work of the speaker using these intertwined approaches to solve a problem on the Ramsey theory of the triangle-free Henson graph.