

STUDENT LOGIC COLLOQUIUM

Andrés Caicedo

will speak on

Forcing

on

Wednesday, November 10

in

891 Evans Hall

at

5:00 p.m.

This first talk in our forcing mini-course will be devoted to introducing the basic concepts necessary for the rest of the course. During the course we will discuss independence proofs in set theory; recursion theoretic properties of generic reals; and applications of forcing to descriptive set theory.

Abstract

We will begin the talk by introducing the basic machinery behind forcing: posets, dense sets, open sets, and generic sets. Then we will discuss the forcing language and generic extensions, and we will state (without proof) the basic theorems about definability of forcing and truth in generic extensions.

Along the way we will discuss some basic set theory used in independence proofs, namely standard models and the tools for constructing them— reflection theorems. Finally, we will discuss the metamathematics behind the forthcoming independence results.