



The Olivetti Club Presents

Iian Smythe

Tuesday 4:25 pm

September 4

406 Malott

It's All Fun and Games...

...until someone proves that every subset of the reals
is Lebesgue measurable!

A Gale-Stewart game is an infinitely-long two player game wherein players take turns building a sequence of digits, i.e., a real number, with the hopes of landing inside or outside (depending on the player) of a specified subset of \mathbb{R} . The existence of winning strategies for one of the players in games with a particular class of target sets can tell us about many “nice” properties those sets may have, such as cardinality, topological complexity, and measurability. We will discuss some of these consequences, the existence of winning strategies, or determinacy, of games, and where such statements sit within the larger set theoretic framework of mathematics.

Refreshments will be served at 4:00 pm in the math lounge.