Undergraduate Math Club
Winter 2006
2nd floor Nesbitt Common Room
February 16, 4:10-5:00pm
(free pizza and pop, as always)

Dennis Clark

Ordinal infinities and Superbases

Abstract

Mathematicians have come up with many ways of grappling with the concept of infinity, from calculus to Cantor's concept of cardinality. One of the most interesting is that of ordinal numbers, which are meant to capture the different kinds of well-ordered sets. Many interesting and unlikely-seeming theorems can be proved with the use of ordinals; this talk will use some basic background material to prove Goodstein's theorem, a truly strange fact about a fast-growing sequence of natural numbers.