

**Undergraduate Math Club
Fall 2005
2nd floor Nesbitt Common Room
Nov. 10, 4:10-5:00pm
(free pizza and pop, as always)**

Tropical geometry

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Abstract

Strange and beautiful things happen when you pass to the lower latitudes – muddy puddles become blue lagoons, suburban strip malls become beachside cabanas, and complicated algebraic curves become simple line drawings.

In this talk I will introduce some basic objects from tropical (non-archimedean, piecewise-linear) geometry. I will attempt to explain how these arise as limits of objects in ordinary (archimedean, curvy) geometry, and how one can use these “tropical degenerations” to solve problems in ordinary geometry, such as counting the number of curves with specified properties.

