

**Undergraduate Math Club
Winter 2006
2nd floor Nesbitt Common Room
March 23, 4:10-5:00pm
(free pizza and pop, as always)**

Prof. Milena Hering

Pick's formula and applications

Abstract

Pick's formula gives the area A of a lattice polygon in terms of the number of its interior points, I , and the number of lattice points on its boundary, B : the formula is $A = I + B/2 - 1$. In this talk I will give a proof of Pick's formula and sketch some of its relations with algebraic geometry, as well as generalizations to higher-dimensional lattice polytopes.