

Math and Stat Colloquium

Thursday, March 31

3:30pm LIB 164

Refreshments will be served in the Lund Hall Foyer at 3pm

Speaker:

Nathan Geer

Department of Mathematics

& Statistics

Utah State University

"The colored Jones polynomial and some of its relative"

Abstract: In this talk I will discuss a problem in quantum topology called the Volume Conjecture. This conjecture relates the colored Jones polynomials with the hyperbolic volume of the knot complement. As I will explain the Volume Conjecture links together elements of topology, geometry and algebra. I will begin with a gentle introduction to knot theory and the definition of the Jones polynomial. Then I will show how to compute the colored Jones polynomial using algebra. Finally, if time permits, after stating the conjecture, I will discuss some related topological invariants.