



The Math Colloquium
Department of Mathematics
San José State University



Robert McGuigan

SJSU

Lower Bounds on the Ropelength of Knots

DECEMBER 1, 2010, MH320

Abstract: The speaker will discuss his experiences at the Research Experience for Undergraduates (REU) summer program at CSU San Bernardino this past summer. The mathematical focus will be on *ropelength*, a quantity of interest in knot theory. Intuitively, ropelength measures how much rope (of a given thickness) is needed to tie a particular knot. The speaker will describe new lower bounds on ropelength for various knots, found through the use of linear programming.

Background: One course in linear algebra recommended. Other material (knot theory, linear programming) will be explained. Students interested in REUs are especially encouraged to attend.

About the speaker: Robert McGuigan is an undergraduate in math at SJSU who will be entering a Ph. D. program in Fall 2011.

SNACKS IN MH331B AT 2:30 PM

TALK STARTS AT 3 PM

For more information, see our full schedule at:

<http://www.math.sjsu.edu/~hsu/colloq/>

