



UNIVERSITY OF CALIFORNIA RIVERSIDE

DEPARTMENT OF MATHEMATICS

COLLOQUIUM

Keiko Kawamuro

"Transverse knots via braids"

Abstract: In this talk, I will discuss several topics related to transverse knots. I will introduce a conjecture on the maximal self-linking number of a topological knot in the standard contact 3-sphere. I will show how to apply braid theory, the HOMFLY polynomial, and the Khovanov-Rozansky homology in order to address the conjecture. I will further discuss the computation of the self-linking number using open-book decomposition and its application to contact geometry.

Wednesday, March 11, 2009

Surge 284

4:10-5:00pm

Tea Time at 3:40pm