

TEMPLE UNIVERSITY MATHEMATICS COLLOQUIUM

Eugene Gorsky

Columbia University

will speak on

Khovanov homology and torus knots

ABSTRACT: In 1984 V. Jones invented a powerful polynomial invariant for knots. In 1999 M. Khovanov constructed a knot homology theory whose Euler characteristic coincides with the Jones polynomial. Although the definition of Khovanov homology is purely combinatorial, its computation turns out to be a hard problem. I will explain the constructions of Jones and Khovanov and report on the recent progress in constructing algebraic models for Khovanov homology (and related homologies) of torus knots.

MONDAY, OCTOBER 21, 2013

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3:40 PM

ROOM 617, WACHMAN HALL

DEPARTMENT OF MATHEMATICS