## **ALGEBRA SEMINAR**

## Homotopy-theoretic methods in the study of spaces of knots and links

Ismar Volić

## Wellesley College

ABSTRACT: I will survey the ways in which algebraic topology (and homotopy theory in particular) has in recent years been used for extracting information about the structure of spaces of knots and links. The genesis of the story is manifold calculus of functors, but the focus will be on related topics such as configuration space integrals and the cosimplicial and operad models for knots and links. I will end with a brief account of some recent results about spaces of homotopy string links, Milnor invariants, and asymptotic invariants of vector fields.

> Monday, April 20, 2015 1:30 – 2:30 pm Room 617, Wachman Hall Department of Mathematics