## **Topology Seminar**

## Marcy Robertson

of University of Western Ontario will be speaking on

## Spaces of Operad Structures

on May 7 at 4:30 in MIT Room 2-131

A multicategory, also known as a colored operad, is simply a generalized non-commutative algebra. In this talk we focus on studying maps between multicategories enriched in simplicial sets. We show that the homotopy function complex of maps between any two multicategories can be computed as the moduli space of a certain small category of (operatic) bimodules. As an application, we show how this description leads to several important decompositions which allow one to compute various geometric invariants.