

Department of Mathematics and Statistics Colloquium

Gauge Theory: Using PDEs to Study Manifolds

Job Candidate

Abstract: Modern geometers often use partial differential equations (PDEs) to infer topological information about geometric objects. Gauge theory provides us with a number of such PDEs that have proven to be invaluable in this pursuit. I will describe several of these PDEs, as well as some of my own work with two of them: the Yang-Mills gradient flow and the instanton equation.

Monday, January 29 at 3:50 in Roop 103

Refreshments at 3:30