Mathematics, Statistics, and Computer Science **@ UIC**

Special Colloquium

Stability in ordered configuration spaces

Jennifer Wilson (Stanford University)

Abstract: The ordered configuration space $F_k(M)$ of a manifold M is the space of ordered k-tuples of distinct points in M. For a fixed manifold M, as k increases, we might expect the topology of these configuration spaces to become increasingly complicated. Church and others showed, however, that when M is connected and open, there is a representation-theoretic sense in which these spaces stabilize. In this talk I will explain these stability patterns, and describe higher-order stability phenomena established in recent work joint with Jeremy Miller. This project was inspired by work-in-progress of Galatius– Kupers–Randal-Williams.

Tea at 4pm in SEO 300

Tuesday, November 14 at 3:00 PM in SEO 636