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

## Algebraic Geometry Seminar

Valuations, Thresholds, and K-stability Harold Blum (University of Michigan)

**Abstract:** In this talk, we will discuss two invariants that measure the singularities of anticanonical divisors on Fano varieties. The first is the global log canonical threshold, which is also known as Tian's alpha invariant. The second is the stability threshold, an invariant recently introduced by Fujita and Odaka. Our approach to understanding these invariants involves valuations. Using results of Fujita and Li, we show that the K-semistability of a Fano variety is detected by the stability threshold. This talk is based on joint work with Mattias Jonsson.

Wednesday, April 25 at 4:00 PM in SEO 427