Speaker: Gregory Smith
Queen's University

Wednesday, September 17, 2014
2:30 PM
258 Hurley Hall

Title: Parliaments of polytopes and toric vector bundles

Abstract:

How do the properties of line bundles extend to vector bundles? After reviewing the basic features of toric vector bundles, we will introduce a collection of rational convex polytopes associated to a toric vector bundle. Lattice points in these polytopes correspond to generators for the space of global sections and edges are related to jets. These polyhedral tools also lead to new bundles with an intriguing mix of positivity properties.