# Michler Lecture

A special Oliver Club offered in memory of Ruth Michler

Megumi Harada, McMaster University

Newton-Okounov Bodies and Integrable Systems

In the theory of toric varieties, the combinatorics of a convex integral polytope Δ is intimately linked with the geometry of an associated toric variety X(Δ); indeed, the polytope Δ fully encodes the geometry of X(Δ) in this case. In more general situations arising in geometry, one can often associate combinatorial data to a group action on a manifold, but usually the combinatorics doesn't completely encode the original geometric data. Recently, however, Kaveh-Khovanskii and Lazarsfeld-Mustata generalized the theory of toric varieties by associating a combinatorial object to an algebraic variety in a very general setting. This talk will be an introduction to this relatively recent theory, with a particular focus on its relationships with symplectic geometry and representation theory.
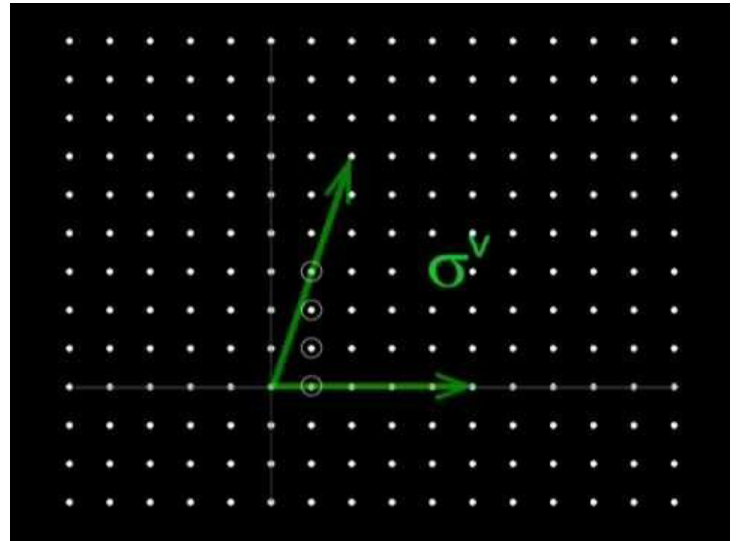
Thursday, March 19, 2015
at 4:00 PM in 532 Malott Hall

Refreshments will be served at 3:30 PM in the Mathematics Department lounge (532 Malott Hall).