

Meeting: 1007, Santa Barbara, California, SS 14A, Special Session on Algebraic Geometry and Combinatorics

1007-14-89 **Joel Kamnitzer*** (jkamnitz@math.berkeley.edu), Department of Mathematics, UC Berkeley,
Berkeley, CA 94720. *Mirkovic-Vilonen cycles and polytopes.*

Mirkovic-Vilonen showed that certain subvarieties of the affine Grassmannian give bases for representations of complex semisimple groups. We will explain recent work to give an explicit combinatorial description of these MV cycles and their moment map images. (Received February 04, 2005)