1086-VN-2449 **Elizabeth Beazley**, **Margaret Nichols**, **Min Hae Park**, **XiaoLin Shi** and **Alexander Youcis*** (ayoucis@terpmail.umd.edu). *Projections on Parabolic Quotients of Affine Weyl Groups.*

Affine Weyl groups and their parabolic quotients are used extensively as indexing sets for objects in representation theory, algebraic geometry, and number theory. Moreover, we can conveniently realize the elements of certain quotients via intuitive geometric and combinatorial models such as abaci, alcoves, root lattice points, and core partitions. Berg, Jones, and Vazirani have described a bijection between n-cores with first part equal to k and $(n-1)$-cores with first part less than or equal to k. This bijection also has an interpretation in terms of the correspondence of Lapointe and Morse between n-cores and $(n-1)$-bounded partitions. This correspondence played a crucial role in the development of k-Schur functions, which are known to represent the Schubert basis in the homology of the affine Grassmannian. In this talk we discuss how to generalize this bijection of Berg, Jones, and Vazirani to parabolic quotients of affine Weyl groups in other classical Lie types. We have developed not only combinatorial techniques to describe this map, but also a visually explicit method utilizing the geometric properties of the alcove model coming from the root system associated to the affine Weyl group. (Received September 25, 2012)