## 1070 - 16 - 265

## Zajj B Daugherty\* (daugherz@stolaf.edu), Arun Ram and Rahbar Virk. The degenerate affine BMW algebra and its center. Preliminary report.

The degenerate affine BMW algebra  $W_k$  was introduced by Nazarov (there called the affine Wenzl algebra) in his study of the Brauer algebras via Jucys-Murphy elements. It arises in Schur-Weyl duality with the orthogonal and symplectic Lie algebras in the same way that the graded Hecke algebra of type A is in Schur-Weyl duality with the Lie algebras  $\mathfrak{gl}_n$  and  $\mathfrak{sl}_n$ , and therefore exhibits many similarities in structure. We will explore how results arise for  $W_k$  which parallel those for the graded Hecke algebra, describing, for example, its center as a ring of symmetric functions. (Received February 14, 2011)