1064-20-318 **Oliver Ruff*** (oruff@kent.edu), Department of Mathematics, Kent State University at Stark, 6000 Frank Avenue NW, North Canton, OH 44720. *Centers of various cyclotomic algebras.*

The algebras collectively referred to here as *cyclotomic* arise in a variety of contexts as families of finite-dimensional quotients of a larger affine algebra. These families of quotients can often be interpreted as being indexed by weights in a way that exhibits deep connections with Lie theory. The most classical example is the degenerate affine Hecke algebra of type A, for which the group algebra of the symmetric group appears as the cyclotomic quotient associated with the highest weight of the natural representation of $\mathfrak{sl}_n$.

In this talk we will discuss algebraic techniques for identifying the centers of certain cyclotomic algebras, focusing on the degenerate and quantum cyclotomic Hecke algebras of type A and the cyclotomic Sergeev superalgebra: these include applications to the representation theory of – respectively – the symmetric group and its double cover. As time permits we will also discuss the analogous case of the degenerate cyclotomic Birman-Murakami-Wenzl algebra, which includes as a special case the classical Brauer algebra. (Received September 13, 2010)