

In this talk we present the classification of the finite irreducible modules over the conformal superalgebra K'_4 obtained by their correspondence with finite conformal modules over the associated annihilation superalgebra $A(K'_4)$. This is achieved by a complete classification of singular vectors in generalized Verma modules for $A(K'_4)$. We also show that morphisms between generalized Verma modules can be arranged in infinitely many bilateral complexes. This classification is a joint work with F. Caselli. We compute the homology of these complexes; this computation provides an explicit realization of all irreducible quotients. Finally we present a technical result and some open problems about the conformal superalgebra CK_6 .