Samuel Herron Chamberlin\* (samcham@math.ucr.edu), University of Califnornia, Riverside, 900 University Ave., Department of Mathematics, Riverside, CA 92521. A realization of the general global Weyl module for  $\mathfrak{sl}_2$ .

Let A be a finitely generated commutative associative algebra over  $\mathbb{C}$ . Given a finite dimensional simple Lie algebra  $\mathfrak{g}$  The global Weyl module for  $\mathfrak{g} \otimes A$  is well known in terms of generators and relations. In the case where  $\mathfrak{g} = \mathfrak{sl}_2$  and  $A = \mathbb{C}[t]$  a realization of this module was given by V. Chari and A. Pressley. We will show that the same realization holds for  $\mathfrak{g} = \mathfrak{sl}_2$  but arbitrary A using a new proof technique. (Received March 26, 2010)