

**Meeting:** 998, Houston, Texas, SS 19A, Special Session on Algebraic Geometry

998-14-339            **Matt Szczesny\*** ([szczesny@math.upenn.edu](mailto:szczesny@math.upenn.edu)). *Orbifold conformal blocks and the stack of pointed  $G$ -covers.*

Starting with a vertex algebra  $V$  and a group  $G$  of automorphisms of  $V$ , we construct sheaves of twisted conformal blocks introduced in work with E. Frenkel over the moduli stack of pointed  $G$ -Covers. These sheaves come equipped with a projectively flat connection, generalizing the Knizhnik-Zamolodchikov connection over  $M_{g,n}$ . (Received March 01, 2004)