1125-14-223 **Natalie Hobson*** (nhobson@uga.edu), UGA, Dept. of Mathematics, Boyd Research Center, Athens, GA 30602. *Vector Bundles of Conformal Blocks- Rank One and Finite Generation.*

The moduli space of curves, $\overline{\mathrm{M}}_{0,n}$, parametrizes stable n-pointed rational curves. To understand this projective variety, we study vector bundles on it. Vector bundles of conformal blocks are an infinite family of such bundles. Since these bundles are all globally generated, they are especially interesting to analyze, as their first Chern classes, the conformal blocks divisors, are all nef. It is an open question as to whether the nef cone, $Nef(\overline{\mathrm{M}}_{0,n})$, is finitely generated for $n > 7$. How does the infinite family of conformal blocks divisors live in $Nef(\overline{\mathrm{M}}_{0,n})$? Is the subcone generated by conformal blocks divisors polyhedral? In this report, I give several of my results to these questions for specific cases of interest. (Received September 14, 2016)