1096-14-2409 **Merrick L Brown***, Dept of Math CB #3250, University of North Carolina, Chapel Hill, NC 27599. *A Study of the Saturated Tensor Cone for Symmetrizable Kac-Moody Algebras.*

Let $\mathfrak{g}$ be a symmetrizable Kac-Moody Lie Algebra and let $G^{\min}$ be the 'minimal' Kac-Moody group with Lie algebra $\mathfrak{g}$. We give a set of necessary inequalities satisfied by the saturated tensor semigroup indexed by products in $H^*(G^{\min}/B, \mathbb{Z})$ for $B$ the standard Borel subgroup. The proof relies on the Kac-Moody analogue of the Borel-Weil theorem and Geometric Invariant Theory (specifically the Hilbert-Mumford index). In the case that $\mathfrak{g}$ is affine of rank 2, we show that these inequalities are necessary and sufficient. (Received September 17, 2013)