

1023-17-471

Brian Boe, Daniel Nakano and **Emilie Wiesner*** (wiesner@math.uga.edu), Dept. of Mathematics, University of Georgia, Athens, GA 30602. *Cohomology of Category \mathcal{O} for the Virasoro algebra.*

This talk will present results on the blocks of the category \mathcal{O} for the Virasoro algebra. BGG resolutions exist for the simple modules in \mathcal{O} , which allow us to compute $Ext_{\mathcal{O}}^n(M(\mu), L(\lambda))$, for a Verma module $M(\mu)$ and a simple module $L(\lambda)$. Using the theory of highest weight categories, we also compute $Ext_{\mathcal{O}}^n(L(\lambda), L(\mu))$. (Received September 14, 2006)