

1009-17-218

**Katherine L. Hurley\*** ([hurley@math.gatech.edu](mailto:hurley@math.gatech.edu)), School of Mathematics, Georgia Tech University, Atlanta, GA 30332. *Virasoro highest-weight vectors and invariant spherical harmonics*. Preliminary report.

This talk describes how to use spherical harmonics to create Virasoro highest-weight vectors for vertex operator algebras. It demonstrates the advantage of using spherical harmonics invariant under the action of a root-system symmetry group and gives examples of spherical harmonics leading to highest-weight vectors of non-zero graded trace. (Received August 16, 2005)