

1024-17-218

**A Milas\***, 1400 Washington Avenue, Albany, NY 12222. *Representations of certain vertex algebras with two and three generators.* Preliminary report.

We shall discuss highest weight modules of certain  $\mathcal{W}$ -algebras with two and three generators. These vertex algebras admit a family of distinguished (ordinary) representations, as well as some natural logarithmic modules. We shall discuss various representation theoretic issues that arise here: explicit realizations of modules, graded dimensions, intertwining operators (both logarithmic and nonlogarithmic), "principal" subspaces, etc. (Received January 09, 2007)