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Cohomology of the Heisenberg-Virasoro Conformal Algebra

We compute the cohomology groups of the Heisenberg-Virasoro conformal algebra with coefficients in its modules $\mathbb{C}$, $\mathbb{C}_a$ and $M_{\Delta, \alpha, \beta}$. In particular, we completely determine the cohomology groups with trivial coefficients both for the basic and reduced complexes.

Keywords: Heisenberg-Virasoro conformal algebra, conformal module, cohomology.

MSC: 17B65, 17B68