
ECKHARD MEINRENKEN, University of Toronto

On the Virasoro coadjoint action

The Virasoro algebra \mathfrak{vir} is the non-trivial central extension of the Lie algebra of vector fields on the circle. There is a well-known 1-1 correspondence between the coadjoint orbits in the level 1 subspace $\mathfrak{vir}_1^* \subset \mathfrak{vir}^*$ and conjugacy classes in a certain open subset $U \subset \widetilde{SL}(2, R)$. We extend this correspondence by taking into account the geometric structure, giving a Morita equivalence between the Poisson structure on \mathfrak{vir}_1^* and the Cartan-Dirac structure on U . (Joint work with Anton Alekseev.)