

This is a report on joint work with Arturo Pianzola. Our goal is to classify twisted toroidal Lie algebras, namely Lie algebras which look like a simple complex Lie algebra  $g$  extended to a Laurent polynomial ring  $R$ . We shall discuss mainly the case of the Lie algebra  $g = sl(n)$  which relates to projective representations of finite abelian groups, quantum tori and Brauer groups of henselian fields.