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Título: Torsors, Reductive Group Schemes And Extended Affine Lie Algebras

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The authors give a detailed description of the torsors that correspond to multiloop algebras. These algebras are twisted forms of simple Lie algebras extended over Laurent polynomial rings. They play a crucial role in the construction of Extended Affine Lie Algebras (which are higher nullity analogues of the affine Kac-Moody Lie algebras). The torsor approach that the authors take draws heavily from the theory of reductive group schemes developed by M. Demazure and A. Grothendieck. It also allows the authors to find a bridge between multiloop algebras and the work of F. Bruhat and J. Tits on reductive groups over complete local fields.

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