

Global Deformations of the Witt/Virasoro Algebra

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The Witt algebra is an infinite dimensional vector field algebra, which has one 1-dimensional central extension, the Virasoro algebra. It is known that those Lie algebras are formally rigid. On the other hand, they have nice nontrivial deformations, like the Krichever-Novikov algebras. This leads to the necessity to introduce a wider notion of deformation, the so-called global deformations. In my talk I will introduce this interesting example and show some of its global deformations.