

Geometry of Maurer-Cartan elements in complex manifolds

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“Stacks of algebroids” in the sense of Kashiwara and Kontsevich are non-commutative deformations of complex manifolds, which replace sheaf of algebras by nonabelian gerbes. The semi-classical data attached to stacks of algebroids are solutions to a certain Maurer-Cartan equation. In this talk, we will discuss the underlying geometry of these Maurer-Cartan elements from the viewpoint of Poisson geometry.

This is a joint work with Z. Chen and M. Stienon.