1117-53-16 Xiang Ji* (xxj104@psu.edu). Deformations in Extended Poisson Geometry.

We consider the problem of deforming a coisotropic submanifold S in an extended Poisson manifold (X, H). Under the assumption that S has a holomorphic tubular neighborhood, we can associate S with an L_{∞} -algebra. Although in general this L_{∞} -algebra does not control the deformations of S, in the case that (X, H) is holomorphic Poisson, an L_{∞} -subalgebra of it does control the deformations of S. With the help of a result of Y. Frégier and M. Zambon, this L_{∞} -algebra can be combined with a differential graded Lie algebra to control the simultaneous deformations of the holomorphic Poisson structure H and the coisotropic submanifold S. (Received November 10, 2015)