

1144-14-58

Cris Negron* (negronc@mit.edu), Massachusetts Institute of Technology, Department of Mathematics, Cambridge, MA 02139. *Hochschild cohomology rings of a global quotient orbifolds*. Preliminary report.

I will discuss recent work with Pieter Belmans, Pavel Etingof, and Travis Schedler, in which we investigate Hochschild cohomology rings of global quotient orbifolds. Equivalently, we study the Hochschild cohomology ring of the category of G -equivariant sheaves on a smooth quasi-projective scheme X , with G is a finite group. We obtain a general structure theorem for the (associated graded) Hochschild cohomology ring of such an object, and observe a surprising obstruction to the extension of Kontsevich's formality result to smooth DM stacks. (Received August 06, 2018)