

1067-16-618

Mihai D Staic* (mstaic@depaul.edu), DePaul University, Chicago, IL 60614. *Secondary cohomology for Hopf algebras.*

For a commutative Hopf algebra A we introduce a new cohomology theory. This is connected with the work of Khalkhali and Rangipour on cyclic modules for Hopf Algebras. If one thinks about the usual cohomology of a Hopf Algebra as the cohomology corresponding to the first level of a “Postnikov tower”, then this new cohomology theory deals with the second level (therefore the need for the Hopf algebra to be commutative). (Received September 11, 2010)