

1096-55-850

Nicholas D Nguyen* (`nicholas.nguyen@uky.edu`). *The adjoint action of a homotopy-associative H-space on its loop space.* Preliminary report.

We define the adjoint action of a homotopy associative H-space on its loop space, generalizing the definition by Kono and Kozima for a Lie group (from Kono, Kozima, 1993). We proceed to use this generalized adjoint action to characterize homotopy associative H-spaces whose homology over \mathbb{F}_p is a commutative ring, generalizing a result of Iwase (from Iwase, 1997). (Received September 10, 2013)