

**Calin Popescu**

*Characteristic zero loop space homology for certain two-cones*

Comment.Math.Univ.Carolinae 40,3 (1999) 593-597.

**Abstract:** Given a principal ideal domain  $R$  of characteristic zero, containing  $1/2$ , and a two-cone  $X$  of appropriate connectedness and dimension, we present a sufficient algebraic condition, in terms of Adams-Hilton models, for the Hopf algebra  $FH(\Omega X; R)$  to be isomorphic with the universal enveloping algebra of some  $R$ -free graded Lie algebra; as usual,  $F$  stands for free part,  $H$  for homology, and  $\Omega$  for the Moore loop space functor.

**Keywords:** two-cone, Moore loop space, differential graded Lie algebra, free Lie algebra on a graded module, universal enveloping algebra, Hopf algebra

**AMS Subject Classification:** 55P35, 55P62, 57T05, 17B70, 17B35