

1171-13-97

Michael DeBellevue and **Josh Pollitz*** (pollitz@math.utah.edu). *A comparison of dg algebra resolutions with prime residual characteristic*. Preliminary report.

Fix a prime integer p , we will discuss the comparison map between certain dg algebra resolutions over a local ring whose residue field has characteristic p . Namely, we show that given a surjective map between such algebras there is a precise description for the minimal model in terms of the acyclic closure, and the comparison map realizes the latter as a quotient of the former provided the acyclic closure has decomposable differential. A first application is that the homotopy Lie algebra of a surjective closed map with residual characteristic p is an abelian Lie algebra. We also use these calculations to show deviations enjoy rigidity properties which detect the (quasi-)complete intersection property. (Received August 09, 2021)