

1078-03-34

John Goodrick, Department of Mathematics, Universidad de los Andes, Bogota, Colombia,
Byunghan Kim*, Department of Mathematics, Yonsei University, Seoul, South Korea, and
Alexei Kolesnikov, Department of Mathematics, Towson University, Towson, MD.

Amalgamation functors and homology groups in model theory, part I.

In this joint work of John Goodrick, Byunghan Kim, and Alexei Kolesnikov, we develop basics of homology theory in a model-theoretic context and connect it with generalized amalgamation properties. This talk will introduce definitions of homology groups H_n , $n \geq 0$, associated to a family of “amalgamation functors”. Main results are: If the generalized amalgamation properties hold, then the homology groups are trivial; H_2 for strong types in stable theories are profinite abelian. (Received November 03, 2011)