Meeting: 999, Nashville, Tennessee, SS 6A, Special Session on Local and Homological Algebra

999-13-269 Melvin Hochster\* (hochster@umich.edu), Department of Mathematics, University of Michigan, East Hall, Ann Arbor, MI 48109-1109. Failure of injectivity for maps of Grothendieck groups from a local ring to its completion. Preliminary report.

It will be shown that even for a Noetherian local domain essentially of finite type over a field, the induced map from the Grothendieck group of all finitely generated modules over the local ring to the corresponding Grothendieck of the completion is, in general, not injective. (Received August 24, 2004)