1067-18-1719 **Alin Stancu*** (stancu_alin1@colstate.edu), Department of Mathematics, Columbus State University, 4225 University Avenue, Columbus, GA 31907. *The Invariance and the General Cohomology Comparison Theorems.*

The *Invariance Theorem* of M. Gerstenhaber and S. D. Schack states that if $\mathbb{A}$ is a diagram of algebras then the subdivision functor induces a natural isomorphism between the Yoneda cohomologies of the category $\mathbb{A}$-**mod** and its subdivided category $\mathbb{A}'$-**mod**. In this paper we generalize this result and show that the subdivision functor is a full and faithful functor between two suitable derived categories of $\mathbb{A}$-**mod** and $\mathbb{A}'$-**mod**. This result combined with our work on the *Special Cohomology Comparison Theorem*, constitutes a generalization of M. Gerstenhaber and S. D. Schack's *General Cohomology Comparison Theorem*. (Received September 21, 2010)