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**Eero Hyry**, Finland, and **Maryam Akhavin\*** ([m.akhavin@gmail.com](mailto:m.akhavin@gmail.com)), Department of Mathematics and Statistics, Univ of Tampere, 33014. *A note on generalized Gorenstein complexes.*

We present a generalization of Gorenstein complexes (as defined by Grothendieck) in the context of relative homological algebra. Utilizing the notion of a canonical module of a complex—which we define at the beginning of our paper—we prove that there exists an equivalence between the category of generalized Gorenstein complexes and the category of modules of the  $G$ -class. We then obtain that a complex is a generalized Gorenstein complex if and only if it is Cohen-Macaulay and the corresponding Cousin complex consists of Gorenstein injective modules. (Received September 13, 2011)