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*for augmented algebras.*

Under certain conditions, a filtration on an augmented algebra  $A$  admits a related filtration on the Yoneda algebra  $E(A)$ . We show that there exists a bigraded algebra monomorphism from  $gr E(A)$  to  $E_{Gr}(gr A)$ , where  $E_{Gr}(gr A)$  is the graded Yoneda algebra of  $gr A$ . This monomorphism can sometimes be applied in the case where  $A$  is connected graded to determine that  $A$  has the  $\mathcal{K}_2$  property recently introduced by Cassidy and Shelton. (Received August 04, 2008)