Approximately zero-product-preserving maps

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A continuous linear map T from a Banach algebra A into another B almost preserves the zero products if $\|T(a)T(b)\| \leq \alpha\|a\|\|b\|$ $(a, b \in A)$ for some small positive α. This talk is mainly concerned with the question of whether any continuous linear surjective map $T\colon A \to B$ that almost preserves the zero products is near, with respect to the operator norm, a continuous homomorphism from A onto B. We show that this is indeed the case for amenable group algebras.