

## عنوان مقاله:

Local higher derivations on  $C^*$ -algebras are higher derivations

## محل انتشار:

مجله آنالیز غیر خطی و کاربردها، دوره 9، شماره 1 (سال: 1397)

تعداد صفحات اصل مقاله: 5

## نویسندگان:

Department of Mathematics, Mashhad Branch, Islamic Azad University, Mashhad, Iran - - -

Department of Mathematics, Mashhad Branch, Islamic Azad University, Mashhad, Iran - - -

Department of Pure Mathematics, Ferdowsi University of Mashhad, P.O. Box 1159, Mashhad 91775, Iran - - -

## خلاصه مقاله:

Let  $\mathfrak{A}$  be a Banach algebra. We say that a sequence  $\{D_n\}_{n=0}^{\infty}$  of continuous operators from  $\mathfrak{A}$  into  $\mathfrak{A}$  is a *local higher derivation* if to each  $a \in \mathfrak{A}$  there corresponds a continuous higher derivation  $\{d_{a,n}\}_{n=0}^{\infty}$  such that  $D_n(a) = d_{a,n}(a)$  for each non-negative integer  $n$ . We show that if  $\mathfrak{A}$  is a  $C^*$ -algebra then each local higher derivation on  $\mathfrak{A}$  is a higher derivation. We also prove that each local higher derivation on a  $C^*$ -algebra is automatically continuous.

## کلمات کلیدی:

Higher derivation, local higher derivation, Derivation, local derivation

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1561830>

