

## Tensor Product and Local Interior $G$ -Algebras

WENLIN HUANG

*School of Mathematical Sciences, Peking University, Beijing 100871, P.R. China  
e-mail: wenlin@math.pku.edu.cn*

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### ABSTRACT

In this paper we get some properties which are compatible with the outer tensor product of local interior  $G$ -algebras in Section 2, in Section 3 we generalize the results of Külshammer in [2] on some indecomposable modules by the tool of inner tensor product of local interior  $G$ -algebras, we also discussed the centralizer  $C_A(A^G)$  of  $A^G$  in  $A$  for an interior  $G$ -algebra  $A$  in Section 4, which makes sense for the extended definition in Section 1.

*Key words:* local interior  $G$ -algebra, tensor  $G$ -algebra, defect group, centralizer.

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