

## عنوان مقاله:

On the defensive alliances in graph

## محل انتشار:

فصلنامه معادلات در ترکیبیات, دوره 8, شماره 1 (سال: 1398)

تعداد صفحات اصل مقاله: 14

## نویسندگان:

Hasan Kharazi - *Department of Mathematics, Faculty of Science, Iran University of Science and Technology, Tehran, Iran*

Alireza Mosleh Tehrani - *Department of Mathematics, Faculty of Science, Iran University of Science and Technology, Tehran, Iran*

## خلاصه مقاله:

Let  $G = (V, E)$  be a graph. We say that  $S \subseteq V$  is a defensive alliance if for every  $u \in S$ , the number of neighbors  $u$  has in  $S$  plus one (counting  $u$ ) is at least as large as the number of neighbors it has outside  $S$ . Then, for every vertex  $u$  in a defensive alliance  $S$ , any attack on a single vertex by the neighbors of  $u$  in  $V - S$  can be thwarted by the neighbors of  $u$  in  $S$  and  $u$  itself. In this paper, we study alliances that are containing a given vertex  $u$  and study their mathematical properties.

## کلمات کلیدی:

Defensive alliance, Alliances in graphs, Edge cut

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1194871>

