

**BĂRZĂ, Silviu, *SOME CONSIDERATION ABOUT COMPONENT MINIMAL COMPLETE SUBGRAPH***

**Abstract:** Giving a graph  $G$  we wish to determine a subgraph  $H$  in which vertices belongs at least to a loop with length equal to 3. Firstly, we give all necessary definitions used in this paper. Secondly, we build the subgraph without isolated vertices and without tree components. Then we give some results that allow us to eliminate vertices and edges but preserve loops with length equal to 3.

**Keywords:** subgraphs, complete graphs

**ACM/AMS Classification:** 05C30