

**BĂRZĂ, Silviu, EQUIVALENT AND STRONG EQUIVALENT GRAPHS WITH APPLICATION IN CLUSTERING**

**Abstract:** Firstly I define equivalent and strong equivalent graphs in terms of isomorphic graphs and with additional use of walks matrix. Those definitions are used then to define a possible clustering process. In this process I do not use individual pieces of information, but set of information for which is defined a possible connection inside a given set of information.

**Keywords:** isomorphic graphs, walks matrix, clustering.

**ACM/AMS Classification:** 05C30, 05C60, 05C75, 91G20