

**Silviu Bârză**, *Some Characterizations on Clustering Using Equivalent Graphs*

**Abstract:** In this paper I wish to give some characterizations on a clustering method applied to sets information with connectivity links inside each set of information.

Because such a structure can be associated with a graph, in a previous paper I consider that clustering is done using so called equivalent graphs and I have proposed a clustering process. The characterization include the maximum number of sets of information in a cluster, the probability that a new set of information placed in cluster to have identical associated graph with a set of information already existent in that cluster. I will introduce too a possible distance between clusters.

**Keywords:** isomorphic graphs, clustering.

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