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Abstract

Complex networks are an imminent multidisciplinary field defined by graphs that present a nontrivial topographic structure. An important information extracted from a complex network is its communities structure. In the literature, there are several communities detection algorithms, however, new research have emerged with the aim of detecting communities efficiently and with lower computational cost. Therefore, this work analyzes different algorithms for communities detection in complex networks with different characteristics, considering the Modularity measure, the execution time and the obtained communities number. The partitions obtained by the different algorithms presented high modularity values and it was observed that the influence of the number of vertices and edges in the execution time of some detection algorithms.

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Index Terms

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Keywords

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