LINKING NUMBERS AND SIMON INVARIANTS IN A LARGE SPATIAL GRAPH

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Abstract

It is shown in [1] that any spatial embedding of a large complete graph contains a link with large linking number. See also [3] and [2]. Simon invariant is another basic invariant of spatial graphs. It is defined for an embedding of a graph that is homeomorphic to the complete graph on five vertices or the complete bipartite graph on three plus three vertices. See [4] for the definition of Simon invariant. We will show that any embedding of a large complete graph contains a subgraph homeomorphic to the complete graph on five vertices or the complete bipartite graph on three plus three vertices which has large Simon invariant.

References

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