Spin models on random bipartite graphs

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Abstract

A software system to investigate the properties of spin models on random graphs will be developed. To facilitate easy parallelism, the project will restrict its attention to bipartite graphs and develop MPI software. An investigation of the best way to partition a random graph into subdomains to be handled on MPI cores will be carried out. The phase structure of these spin models will be studied in detail.

1 Background of problem

2 Implementation

3 Plan