EXACTLY SOLUBLE MODELS FOR SURFACE PARTITION OF LARGE CLUSTERS

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Summary

The surface partition of large clusters is studied analytically within a framework of the "Hills and Dales Model". Three formulations are solved exactly by using the Laplace—Fourier transformation method. In the limit of small amplitude deformations, the "Hills and Dales Model" gives the upper and lower bounds for the surface entropy coefficient of large clusters. The found surface entropy coefficients are compared with those of large clusters within the 2- and 3-dimensional Ising models.