Interfaces in the 2D Potts model

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Abstract

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Chapter 1

Introduction

In the field of Computational Physics, there is a large interest in lattice simulation. One of the most simple models that still exhibits non trivial behaviour is the q-state Potts Model. By Restricting the Potts model to 2 dimensions and the number of independent states,$q = 2$ you can determine the behaviour at high,low and critical temperatures analytically this is known as the Ising Model [1].

Chapter 2

Theory

Chapter 3

Code

Chapter 4

Results

Chapter 5

Discussion of Results

Bibliography

[1] Elliott W. Montroll, Renfrey B. Potts, and John C. Ward. Correlations and spontaneous magnetization of the two dimensional ising model. *Journal of Mathematical Physics*, 4(2):308–322, 1963.