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The description of generalized translation-invariant p-adic Gibbs measures for the Potts model on the Cayley tree of order three

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Abstract

Abstract: We describe generalized translation-invariant p-adic Gibbs measures for the Potts model on the Cayley tree of order three, confirming and extending the related results in the literature. We introduce a cube root function over the p-adic field \mathbb{Q}_p , which enables us to explicitly prescribe all roots of the cubic monomial equation over \mathbb{Q}_p . © 2023, Pleiades Publishing, Ltd.

Author Keywords

Cayley tree; Gibbs measure; p-adic field; Potts model

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