

Abstract Submitted
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Fractal structure of a solvable lattice model KAZUHIKO MINAMI,
Nagoya University — A fractal set which corresponds to the six-vertex model is introduced and a relationship between the free energy of the six-vertex model and the fractal dimension of the fractal set is formulated. It is pointed out that notions which correspond to the transfer matrix method and the n-equivalence relation in lattice theory have been introduced in the area of fractal geometry. These relations can be generalized to the case of the models suitable to the transfer matrix treatment. [1] K.Minami, An Equivalence Relation of Boundary/Initial Conditions and the Infinite Limit Properties, J. Phys. Soc. Jpn. 74 (2005) 1640. [2] K.Minami, The Free Energies of Six-Vertex Models and the n-Equivalence Relation, J. Math. Phys. 49 (2008) 033514. [3] K.Minami, Fractal structure of a solvable lattice model, cond-mat/0801.0186

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