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Moduli integrals in the minimal models on random surfaces

Yukitaka Ishimoto

Okayama Institute for Quantum Physics,
1-9-1 Kyouyama, Okayama 700-0015, Japan

In conformal field theoretical language, Ising model is classified to the minimal models and is well described by field theory. In the same sense, Ising model on random lattices can be classified to and treated in the context of the minimal models on random surfaces. Such models are, in other words, the minimal models coupled to two-dimensional gravity, which can be constructed with Liouville field theory and minimal matter theory. Since the theory is free field alike, we can formally express its correlation functions of both gravity part and matter part. However, their exact functional forms are far from being trivial. Especially, its summation over surfaces contain the troublesome moduli integrals whose integrands are often singular even in the simplest cases. We show how to regularise these singularities, and also show that there is a class of such integrals that vanish after the regularisation. We also intend to discuss its meanings.