ID de Contribution: **15** Type: **Non spécifié**

Three Dimensional Ising Model as a Non-critical String Theory

jeudi 2 juin 2022 11:00 (1 heure)

I will discuss the sign factor problem in the 3D gauge Ising model, and present the corresponding fermionic model on random surfaces, which leads to the formulation of non-critical fermionic string theory on the basis of induced Dirac action.
I will demonstrate how the sign factor model is linked to ordinary and spin quantum Hall plateau transitions, tying them also to non-critical string theory. Based on the sign-factor model new type of matrix model will be formulated, which allows consideration of any spin chain models on random surfaces. This approach opens the way to cross the c=1 barrier in non-critical string theory.

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