

# Thermodynamics of $\overline{TT}$ -bar deformed $O(N)$ vector model

*Wednesday, December 16, 2020 4:00 PM (20 minutes)*

We investigate an irrelevant deformation of 2D quantum field theories, called “ $\overline{TT}$ -bar deformation”. Although this is known as an integrable deformation, its quantum aspects have not been completely understood yet. For example,  $\overline{TT}$ -bar deformation of the free massless  $O(N)$  vector model is said to be Nambu-Goto action in the static gauge. In this talk, we compute the thermal free energies in both theories, and discuss the equivalence between  $\overline{TT}$ -bar deformed  $O(N)$  vector model and Nambu-Goto action at quantum level.

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**Session Classification:** Short talks