



Contribution ID: 572

Type: Poster

Deconfinement phase transition in bosonic BMN model at general coupling

Thursday 15 December 2022 14:00 (1 hour)

We present our analysis of the deconfinement phase transition in the bosonic BMN matrix model. The model is investigated using a non-perturbative lattice framework. We used the Polyakov loop as the order parameter to monitor the phase transition, and the results are verified using the separatrix ratio. The calculations are performed using a large number of colors and a broad range of temperatures for all couplings. Our results indicate a first-order phase transition in this theory for all the coupling values that connect perturbative and non-perturbative regimes of the theory.

Session

Beyond the Standard Model

Primary authors: Mr SAMLODIA, Abhishek (Syracuse University, USA); Dr JOSEPH, Anosh (IISER Mohali, India); Dr SCHAICH, David (University of Liverpool, United Kingdom); Mr DHINDSA, Navdeep Singh (IISER Mohali, India); Dr JHA, Raghav G. (Thomas Jefferson National Accelerator Facility, USA)

Presenter: Mr DHINDSA, Navdeep Singh (IISER Mohali, India)

Session Classification: Poster - 3