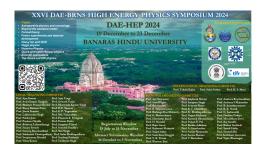
## XXVI DAE-BRNS High Energy Physics Symposium 2024



Contribution ID: 121 Type: Oral

## Magnetically Induced Quarkonium Melting in a Dynamical Einstein-Born-Infeld-Dilaton Framework

We extend the potential reconstruction technique to establish a dynamical Einstein-Born-Infeld-dilaton model, which serves as a framework for investigating the melting of holographic quarkonium under an applied magnetic field. The model's non-linearity enables the magnetic field to interact directly with the quarkonium's internal structure, bypassing the need to introduce charged flavor degrees of freedom that back-react. By calculating the melting temperature from the spectral functions, we observe a transition from inverse magnetic catalysis to magnetic catalysis occurs as the magnetic field strength rises. Additionally, we examine the impact of anisotropy induced by the external field.

## Field of contribution

Theory

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Track Classification: Heavy ion and QCD