Lattice 2023



Contribution ID: 281

Type: Parallel Talk

Extracting Yang-Mills topological structures with adjoint modes

Thursday, 3 August 2023 17:00 (20 minutes)

We report on how adjoint zero modes can be used to filter out the topological structures of gauge configurations from the UV fluctuations. The techniques presented here look promising to investigate regimes relevant to recent studies based on semiclassical methods. A particularly interesting application is to test whether the dynamics of fractional instantons can explain properties of the Yang-Mills vacuum like the string tension and finite topological susceptibility.

Topical area

Vacuum Structure and Confinement

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Session Classification: Vacuum Structure and Confinement