XXV DAE-BRNS High Energy Physics Symposium 2022



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Effective Hamiltonian for a quark-antiquark system in heavy-flavor QCD

Tuesday 13 December 2022 14:00 (1 hour)

We apply the renormalization group procedure for effective particles (RGPEP) for a single flavor quark to obtain an effective Hamiltonian in light-front QCD for heavy quarkonia. We introduce gluon mass ansatz that leads to truncation up to the quark-anti-quark gluon sector. Using the renormalized Hamiltonian and appropriate Fock state basis we formulate the eigenvalue problem for quarkonium.

Session

Heavy Ions and QCD

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