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Medium Screening Effects on the Quarkonia States

Tuesday 29 September 2015 16:30 (2 hours)

We have studied the stability of heavy quarkonia states in a QGP by incorporating color screening effects, vacuum screening effects and the color screening radii. We have particularly looked into the ground state, orbitally excited state and radially excited states of charmonia and bottomonia. The dependence of energy eigenvalues on screening parameter μ and the strength of the quark-antiquark potential have been studied. It is observed that with increase in the potential strength, color screening radii r_D increases, while vacuum screening parameter μ_{vs} decreases with increase in potential strength. Also noticed that J/psi is more stable against the vacuum screening effects. The detailed results and calculations will be presented at the time of conference.

On behalf of collaboration:

NONE

Primary author: BHATT, PALAK (Department Of Physics, Sardar Patel University)

Co-authors: Ms PATEL, Smruti (Department Of Physics, Sardar Patel University); Mr P.C., Vinodkumar (Department Of Physics, Sardar Patel University)

Presenters: BHATT, PALAK (Department Of Physics, Sardar Patel University); Ms PATEL, Smruti (Department Of Physics, Sardar Patel University)

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