

J/Ψ mass shift and J/Ψ -nuclear bound state

We calculate mass shift of the J/Ψ meson in nuclear matter arising from the modification of DD , DD^* and D^*D^* meson loop contributions to the J/Ψ self-energy. The estimate includes the in-medium D and D^* meson masses consistently. The J/Ψ mass shift (scalar potential) calculated is negative (attractive), and complementary to the attractive potential obtained from the QCD color van der Waals forces. Some results for the J/Ψ -nuclear bound state energies are also presented.

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