Hadronic interactions of the J/psi

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Abstract

Using a chiral approach, we evaluate the cross sections for interactions of the J/ψ with light mesons. We complement this with a prescription for hadronic form factors that is consistent with Lorentz symmetry and gauge invariance in the electromagnetic sector. The choice of form factors is constrained by hadronic phenomenology. We evaluate some hadronic absorption and elastic channels that have not been considered up to now, and we compare our approach with those of others. We finally evaluate the finite temperature J/ψ spectral function.

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