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Electromagnetic field effects on Υ meson suppression in PbPb collisions at LHC energies

Monday 28 August 2017 11:00 (30 minutes)

We investigate the effect of the electromagnetic field generated in relativistic heavy-ion collisions on the suppression of Υ mesons. The electromagnetic field is calculated using a simple model which characterises the emerging quark–gluon plasma (QGP) by its conductivity only. A numerical estimate of the field strength experienced by Υ mesons embedded in the expanding QGP and its consequence on the Υ dissociation is made. The electromagnetic field effects prove to be negligible compared to the established strong-interaction suppression mechanisms. In particular, they cannot substantially modify our model prediction for the suppression of the Υ (2S) state in peripheral collisions.

Topic:

Topic: Heavy Ion Collisions and Critical Phenomena

Summary

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