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Exploring effects of magnetic field on the Hadron Resonance Gas

Tuesday 29 September 2015 16:30 (2 hours)

We present a study of the effects of magnetic fields on various physical quantities in hadron resonance gas model. We find significant non-trivial dependence of particle ratios on the magnetic field. Depending on the charge and spin, some of the particle ratios are even getting inverted due to the magnetic field. There is also significant changes in the fluctuations of net baryon number, electric charge and strangeness. This is also reflected in various fluctuation ratios along the freezeout curve.

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