عنوان مقاله:

Baryon density and magnetic field effects on chaos in a $Q\bar{Q}$ system at finite temperature

محل انتشار:

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خلاصه مقاله:

Baryon density and magnetic field effect on chaos for the holographic dual of a $Q\bar{Q}$ system at finite temperature is studied. A string in an AdS Reissner-Nordstrom background, and in a metric with magnetic field near the black-hole horizon is considered and small time-dependent perturbations of the static configurations are investigated. The proximity to the horizon induces chaos, which is softened increasingthe chemical potential or the magnetic field. A background geometry including the effect of a dilaton is also examined. The Maldacena, Shenker, and Stanford bound on the Lyapunov exponents characterizing the perturbations is satisfied for finite baryon chemical potential and magnetic field and when the dilaton is included in the metric.

کلمات کلیدی:

AdS/CFT correspondence, MSS bound on chaos, High Energy Physics