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Heavy quark potential in the presence of momentum anisotropy at finite magnetic field

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The study explores how heavy quarkonia behave in a hot quark-gluon plasma (QGP) that is both magnetized and exhibits finite momentum anisotropy. The concept of inverse magnetic catalysis is considered, which impacts the Debye screening mass altered by the magnetic field, and in turn affects the effective quark masses. Our findings show that both the momentum anisotropy and inverse magnetic catalysis significantly influence the thermal decay rates and dissociation temperatures of heavy quarkonia.

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