

11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



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Typ: Poster

Anisotropic quenching of heavy flavor in flowing matter

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During the last years, there has been an increasing interest in how the quark mass affects the jet quenching phenomena and dynamics of heavy flavor in HIC. Here, we will present a new effect, which consists in anisotropic broadening and gluon radiation sourced by the background flow, transverse to the parton momentum, and sensitive to the quark mass. This effect appears due to a modification of the scattering potential in evolving matter, and scales as second power of mass over the parton energy. We will also discuss how this mass ordered anisotropy affects the overall heavy flavor directionality in HIC and its possible effect in the observed harmonic coefficients from the corresponding momentum anisotropy in both small and large systems.

Experiment/Theory

Theory/Phenomenology

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Sitzung Einordnung: Poster Session

Track Klassifizierung: Heavy flavor and quarkonia