## **Quark Matter 2023**



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## Suppression and flavor correlation modification of leading di-hadron at RHIC and the LHC

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The study of the suppression of the leading two hadrons within jets, by virtue of being robust against the underlying event background, provides an insight into the onset of quenching in the history of the evolution of relativistic heavy-ion collisions, which can help discriminate between different partonic energy loss mechanisms. The modification of their flavor correlations, on the other hand, probes hadronization in the last stage of jet evolution. Using a variety of Monte Carlo simulations, in this talk, we will present first phenomenological studies of di-hadron observables and their dependence on quark and gluon jet origins, thereby motivating future leading di-hadron measurements at RHIC and the LHC.

## Category

Theory

## Collaboration (if applicable)

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