

## Jet Quenching Dependence on Angularities and Flavor at RHIC

This presentation delves into the intricate interactions between jets and the quark-gluon plasma in heavy-ion collisions. We explore modifications in jet characteristics, focusing on generalized angularities and parton flavor dependence. In heavy ion collisions at the LHC, jet shapes and generalized angularities have already revealed a migration of charged jet energy towards its periphery and more quark-like jet fragmentation in the QGP medium. In this study, we extend these findings with measurements of fully corrected jet angularities using hard-core jets in Au+Au collisions at the top RHIC energy with the data collected with STAR. Additionally, with measurements of D0 meson tagged jets, we explore the parton flavor dependence of jet-medium interactions. Nuclear modification factors, fragmentation functions, and the radial profile of D0 mesons associated with jets contribute to discerning between jet quenching models and advancing our understanding of QGP properties. Jet modification studies at the top RHIC energy shed further light on the physics of jet quenching and explore phase-space regions that might be distinct from those probed at the LHC.