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Flavor dependent parton cascades in expanding media

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Going beyond the simplified gluonic cascades, we have introduced full flavor treatment by including both gluon and quark degrees of freedom for partonic cascades inside

the medium. We then solve the set of coupled evolution equations with splitting kernels calculated analytically for exponentially expanding and Bjorken media to arrive at

medium-modified parton spectra for quark and gluon initiated jets. For our calculations, we have included phenomenologically driven flavor fractions for the calculation

of inclusive jet R_{AA} and its rapidity dependence. Finally, we have studied the path-length dependence of jet quenching for different types of expanding media by

calculating the jet v_2 . These studies help to quantify a discriminating power of different observables for distinguishing the type of the medium expansion.

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