



Contribution ID: 235

Type: **Talk**

Scaling properties of jet quenching in expanding media

Thursday, 10 September 2020 16:55 (25 minutes)

We present a study of the impact of the expansion of deconfined medium on single-gluon emission spectra and the jet suppression factor (Q_{AA}) within the BDMPS-Z formalism. These quantities are calculated for three types of media (static medium, exponentially decaying medium and Bjorken expanding medium). The distribution of medium-induced gluons and the jet Q_{AA} are calculated using the evaluation of in-medium evolution with splitting kernels derived from the gluon emission spectra. Scaling behavior of splitting kernels is derived for low- x and high- x regimes in the asymptote of large times and its impact on the resulting jet Q_{AA} is discussed. For the full phase space of the radiation, the scaling of jet Q_{AA} with an effective quenching parameter is presented.

Is this abstract from experiment?

No

Internet talk

Yes

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

Yes

Details

Souvik Priyam Adhya

Primary author: Mr ADHYA, Souvik Priyam (Institute of Particle and Nuclear Physics Faculty of Mathematics and Physics, Charles University)

Presenter: Mr ADHYA, Souvik Priyam (Institute of Particle and Nuclear Physics Faculty of Mathematics and Physics, Charles University)

Session Classification: Semiplenary