## 9th International Conference on New Frontiers in Physics (ICNFP 2020)



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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

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#### Session Classification: Semiplenary