



Contribution ID: 26

Type: **not specified**

Probing medium response via hadron chemistry around quenched jets

Saturday 28 September 2024 16:20 (20 minutes)

Jet-medium interaction not only leads to the energy loss of jet partons, but also induces medium excitations, such as the Mach cone generated by supersonic partons passing through the QGP. It is currently a hot topic to search for the decisive signal of jet-induced medium excitation in high-energy nuclear collisions. Here we present our recent work on searching for the signature of medium response via hadron chemistry around quenched jets. More specifically, we find that the baryon-to-meson ratio and strangeness productin around the triggered jets in heavy-ion collisions are enhanced comapred to proton-proton collisions. Since the deposited energy by the quenched jets can flow to large angles in the medium, such enhancement is stronger for larger values of the relative distance with respect to the jet axis.

Category

Theory

Collaboration

Authors: QIN, Guang-You (Central China Normal University); LUO, Ao; Prof. WANG, Enke (South China Normal University); ZHANG, Hanzhong (IOPP, CCNU); CAO, Shanshan (Shandong University); MAO, Yaxian (Central China Normal University CCNU (CN))

Presenter: QIN, Guang-You (Central China Normal University)

Session Classification: Session 4