



EINLADUNG

im Rahmen des Teilchenphysikseminars

zum Vortrag

von

Ankita Budhraj

(NIKHEF, Amsterdam)

über

„Medium modifications to jet angularities“

Abstract:

When a high energy parton traverses the medium (QGP), it undergoes multiple interactions with the medium constituents leading to a modification of its radiation pattern.

By utilizing jet angularity measurements on such a jet, one can control the sensitivity of the observable to collinear emissions in the jet through a continuous parameter a , with $a < 2$.

We utilise the framework of SCET with Glauber gluons (SCETG) to study medium effects on ungroomed angularity distributions for the range $a < 1$.

Within SCETG, the jet-medium interactions are incorporated by off-shell Glauber gluons generated from the color charges in the medium.

We find that, in the medium, the angularity distributions are narrower and have a steeper fall compared to the vacuum ones.

I will provide a qualitative understanding of this apparent narrowing effect in the medium, consistently within the SCETG framework.

I will also discuss results for jets initiated by different parton energies, for jets with different cone sizes as well as for two different centrality classes.

Zeit: Dienstag, 10.10.2023, 16:15 h

Ort: Erwin-Schrödinger-Hörsaal, Boltzmannngasse 5, 5. Stock

Join Zoom Meeting - Meeting ID: 933 4269 3866 Passcode: 185096

<https://univiennea.zoom.us/j/93342693866?pwd=aUpTR0VJNUhJY2Q0ajdaKzI1YWVVBQT09>

gez.: A. Hoang, M. Procura