Fakultät für Physik
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E I N L A D U N G

im Rahmen des Teilchenphysikseminars

zum Vortrag

von

Ankita Budhraja

(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, Boltzmanngasse 5, 5. Stock

Join Zoom Meeting - Meeting ID: 933 4269 3866 Passcode: 185096
https://univienna.zoom.us/j/93342693866?pwd=aUpTR0VJNUhJY2Q0ajdaKzI1YWVBQT09

gez.: A. Hoang, M. Procura