

# 11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Beitrag ID: 168

Typ: Poster

## Assessing QGP momentum scales with energy correlators

*Dienstag, 28. März 2023 18:15 (2 Stunden)*

Correlation functions of energy flow operators have been recently proposed as a tool to identify the onset of colour coherence within the jets. As a promising exploration avenue to unveil the scales of the Quark-Gluon Plasma, it has yet to be demonstrated how the medium back-reaction to the jet propagation will blur such identification. In this work, by using a perturbative prescription to describe the jet-medium interactions and its re-scatterings, we show which weight of the normalised two-point correlator can maximise the separation between the wide range of momentum scales that go into the development of an in-medium jet: in-medium radiation and medium-recoiling particles. Additionally, we also explore the energy correlators' sensitivity to the different medium response momentum scales and their thermalization.

### Experiment/Theory

Theory/Phenomenology

### Affiliation

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**Sitzung Einordnung:** Poster Session

**Track Klassifizierung:** High momentum hadrons and correlations