

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



Beitrag ID: 249

Typ: **Talk**

## Thermalization of a jet wake in QCD kinetic theory

*Mittwoch, 29. März 2023 15:20 (20 Minuten)*

We study the energy deposition of a high-momentum parton traveling through a Quark-Gluon Plasma using QCD kinetic theory. We show that the energy is first transported to the soft sector by collinear cascade and then isotropised by elastic scatterings. Remarkably, we find that the jet wake can be well described by a thermal distribution function with angle-dependent temperature. This could be used for effective phenomenological descriptions of jet thermalization in realistic heavy-ion collision simulations.

### Experiment/Theory

Theory/Phenomenology

### Affiliation

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**Sitzung Einordnung:** Parallel: Jets and their modification in QCD Matter

**Track Klassifizierung:** Jets and their modification in QCD matter