Contribution ID: **581** Type: **parallel**

In medium hadronization and pt-broadening at low energies

Thursday 9 January 2025 17:50 (20 minutes)

Semi-inclusive DIS off nuclei plays a central role in studying the spacetime development of hadronization. An important quantity is the distance traveled by the parton before its color neutralization, the so-called production length Lp. We focus on the pt-broadening observable that should offer direct access to the production length. However, while simple calculations work well for HERMES data, they fail for the CLAS 6 experiment, whose data show an unexpected behavior. We explore the idea that nuclear transverse-momentum-dependent (TMD) parton densities (PDFs) provide a satisfying explanation.

Author: BENJAMIN, guiot (Universidad frederico santa maria)

Presenter: BENJAMIN, guiot (Universidad frederico santa maria)

Session Classification: Parallel session 9: Nuclear Physics