Quark Matter 2023



Contribution ID: 385

Type: Oral

Modification of heavy quark hadronization in high multiplicity collisions at LHCb (remote)

Tuesday 5 September 2023 12:20 (20 minutes)

The differences in hadron chemistry observed at e+e- machines versus hadron colliders may indicate that the mechanisms by which partons evolve into visible matter are not universal. In particular, the presence of many other quarks produced in the underlying event may affect the hadronization process. With full particle ID, precision vertexing, and a high rate DAQ, the LHCb detector is uniquely well suited to study the hadronization of heavy quarks. This contribution will present LHCb data on hadronization of heavy charm and bottom quarks, including the first results on the b baryon-to-meson production ratio versus charged particle multiplicity.

Category

Experiment

Collaboration (if applicable)

LHCb

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Track Classification: Heavy Flavor