

10th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



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Type: Oral Presentation

Measurements of nuclear modification factors of B_S^0 and B^+ mesons in PbPb collisions with the CMS experiment

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Beauty quarks are considered as one of the best probes of the strongly interacting medium created in relativistic heavy-ion collisions because they are predominantly produced via initial hard scatterings. Measurements of B meson production provide information about the diffusion of beauty quarks and the flavor dependence of in-medium energy loss. In these studies, clarifying the hadronization mechanism is crucial for understanding the transport properties of beauty quarks. Measurements of B_S^0 production can shed light on the mechanisms of beauty recombination in the medium and provide information about strangeness enhancement in the quark-gluon plasma. In this talk, we will present a new measurement of the ratio of B_S^0 to B^+ mesons in PbPb collisions at 5.02 TeV with the CMS detector, using data recorded in 2018.

Collaboration (if applicable)

CMS

Track

Heavy Flavor and Quarkonia

Contribution type

Contributed Talk

Primary author: PETRUSHANKO, Serguei (M.V. Lomonosov Moscow State University (RU))

Presenter: SHI, Zhaozhong (Massachusetts Inst. of Technology (US))

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