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Typ: Talk

Search of hot QCD effects via dynamics and productions of heavy flavor quarks in small systems with CMS detector

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The surprising collectivity signal emerging in small hadronic systems for light and heavy quarks raises the question whether a quark-gluon plasma is created in those systems too. The conjectured QGP formation could also enhance baryon production because of coalescence processes. Moreover, strangeness enhancement signals have been observed. Recent measurements show charm baryon-to-meson ratios are enhanced in heavy ion collisions compared to pp collisions. In this talk, the studies of collectivity for charm and bottom mesons in pp and pPb collisions will be presented. New measurements of the multiplicity dependence of charm baryon-to-meson ratios will also be presented over a wide multiplicity range, and compared with those in the strangeness sector. These measurements provide new insights into the origin of heavy flavor hadron collectivity and charm hadronization.

Experiment/Theory

CMS

Affiliation

CMS

Hauptautor: ZHANG, Yousen

Vortragende(r): ZHANG, Yousen

Sitzung Einordnung: Parallel: Heavy Flavours & Quarkonia

Track Klassifizierung: Heavy flavor and quarkonia