Contribution ID: **702** Type: **Parallel session talk**

Investigating the hidden strangeness content of exotic resonance with ALICE

Friday 19 July 2024 17:30 (15 minutes)

In the last decade, several resonances in the mass range 900-2000 MeV/c^2 (e.g. $f_0(980)$ and $f_1(1285)$) have been proposed to have exotic quark compositions. Theory predicts it can be a linear composition of two u and d quarks or can have hidden strangeness to form tetra-quark hadrons or hadrons with a hybrid structure. The excellent particle identification capabilities of the ALICE detector provide an opportunity to explore the high mass resonances. This study reports the first measurement of the production cross section of f_1 and f_0 resonances in pp and p-Pb collisions at the LHC energies. The measurements of yields will be presented and compared to the statistical hadronization model (SHM) to shed light on the hidden strange content of these resonances. In addition to that, a multiplicity dependent study of f_0 resonance production is presented, in search for the possible rescattering effect in the hadronic phase of high multiplicity pp and p-Pb collisions.

Alternate track

I read the instructions above

Yes

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