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Investigating strangeness enhancement in jets and medium in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with ALICE

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We probe the origin of strangeness enhancement by separating the strange particles produced in hard processes (jets) from those produced in soft processes (bulk) using the measurement of triggered hadron- $\phi(1020)$ and hadron- Λ angular correlations. Separating these measurements by event multiplicity in p-Pb collisions allows one to measure the effects of increasing system size on both strange quark production and hadron formation. Previous inclusive strangeness measurements show an increase in the yield ratios of strange over non-strange particles (e.g. an increase in the ϕ/π and Λ/π ratios) with increasing system size in Pb-Pb, p-Pb, and pp collisions. In this poster we present current measurements of the $\phi(1020)/h$ ratio in jets and medium in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV using the ALICE detector. We also present the first steps towards investigating Λ production in jets within the same collision system. These steps include the optimization of the momentum of the triggering hadron and the Λ signal extraction via V^0 and mixed-event techniques.

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