

# Polarization and flow of multi-strange hadrons with ALICE

*Thursday, 18 July 2024 15:19 (17 minutes)*

The elliptic flow ( $v_2$ ) of identified hadrons is an observable sensitive to the early dynamics of heavy-ion collisions and to the equation of state (EoS) of the medium. In particular, strange and (multi-) strange baryons have small hadronic cross-sections, thus being clean probes of the early stages of the collision systems' evolution. Additionally, strange and multi-strange baryons are also sensitive to the vorticity of the produced medium and to the magnetic field that it experiences at collision time. The effect of vorticity and magnetic field can be examined experimentally by studying the polarization of strange and (multi-) strange baryons. This talk will present the  $v_2$  and the polarization of  $\Lambda$ ,  $\Xi^\pm$  and  $\Omega^\pm$  measured with the high statistics Pb-Pb collisions collected by the ALICE collaboration during the Run 3 of the LHC.

## Alternate track

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Yes

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