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## Strange particle collectivity in pPb and PbPb with CMS

*Tuesday 18 May 2021 09:30 (20 minutes)*

We present the elliptic azimuthal anisotropy coefficient ( $v_2$ ) of the identified strange hadrons  $K_S^0$  and  $\Lambda$  using the scalar product and multi-particle cumulant methods in pPb collisions at 8.16 TeV and PbPb collisions at 5.02 TeV at mid-rapidity ( $|y| < 1$ ). The data samples were collected by the CMS experiment at the LHC. The scalar product and multi-particle  $v_2$  values are measured as a function of  $p_T$  for different centralities in PbPb and event multiplicities in pPb collisions. The  $v_2$  results are compared to the inclusive charged hadrons as well as the hydrodynamic model calculations with different initial state conditions. The identified multi-particle  $v_2$  in such a small collision system is measured for the first time. The results shed light on the initial state effects of the strange quark in large and small collision systems.

### Collaboration

CMS

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**Session Classification:** Bulk (Collectivity)

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