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Collective flow measurements in OO and NeNe collisions with CMS

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Measurements of collective flow in intermediate size collisions such as OO and NeNe are crucial for understanding the origin of collectivity in small systems and its evolution with collision system size. Furthermore, they are crucial for probing the possible exotic nuclear structure of the nucleus. With data collected by the CMS experiment at the LHC, charged particles v_n (n=2,3) are reported in OO and NeNe collisions using two-and multiple-particle correlations as functions of centrality. The results are compared with pp, pPb, and PbPb collisions as well as theoretical calculations to provide new insights into the origin of collectivity in small systems and nuclear structure of O and Ne nucleus.

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