

Abstract Submitted
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Higher order flow harmonics from 2.76 TeV PbPb collisions measured by CMS¹ SHENGQUAN TUO, Vanderbilt University, CMS COLLABORATION — Collective flow is an important probe of the earliest stages in the expansion of the hot and dense matter created in relativistic heavy-ion collisions. Higher harmonics of the azimuthal distribution of emitted particles, in particular v_3 and v_4 , complement v_2 measurements in elucidating the dynamical evolution of the bulk medium and providing constraints on its transport properties. With its large acceptance and broad rapidity coverage, the CMS detector is ideally suited to provide detailed analyses of higher order harmonic flow at the LHC. Measurements of v_n ($n = 2$ to $n = 6$) in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV using the event-plane, cumulant, and Lee-Yang zeros methods will be presented as a function of p_T and centrality. The scaling of the higher order flow harmonics with initial participant eccentricity will be examined.

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