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Elliptic flow results from 2.76 GeV PbPb collisions measured by CMS¹ ERIC APPELT, Vanderbilt University, CMS COLLABORATION — We report on the CMS measurements of the unidentified charged hadron anisotropy parameter, v2, using four different methods: the event-plane, two- or four particle cumulants, and Lee-Yang zeros. Consistent results are found for the different methods after considering their respective sensitivities to non-flow correlations and event-by-event fluctuations in the initial conditions. The anisotropy is studied as a function of transverse momentum, pseudorapidity and centrality in a broad kinematic range: 0.3 < pT < 20 GeV/c, $|\eta| < 2.4$, and in 12 centrality classes in the range 0-80%. The CMS results are compared to results obtained at lower center-of-mass energies and various scaling behaviors are examined. The eccentricity-scaled v2 is found to obey a universal scaling with the transverse particle density in different collisions systems and center-of-mass energies. These results are obtained from a large sample of over 22 million events, representing a nearly ten fold statistical increase over previously reported CMS results.

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