Abstract Submitted for the APR11 Meeting of The American Physical Society

Possibility to disentangle anisotropic flow, flow fluctuation, and nonflow LI YI, Purdue University, AIHONG TANG, FUQIANG WANG, Purdue University — We suggest the possibility to disentangle anisotropic flow, flow fluctuation, and nonflow using two-, four-, six-particle azimuthal moments assuming Gaussian fluctuations. We show that such disentanglement is possible when the flow fluctuation are large, comparable to the average flow magnitude. When fluctuations are small, the disentanglement becomes difficult. We verify our results with toy-model Monte Carlo simulation. We plan to use this method in real data analysis.

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Date submitted: 14 Jan 2011

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