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**Flow-background subtraction in the charge-separation measurements in heavy-ion collisions** FUFANG WEN, UCLA — Recent azimuthal-angle correlation measurements in high-energy heavy-ion collisions have observed charge-separation signals perpendicular to the reaction plane, and the observations have been related to the chiral magnetic effect (CME) [1]. However, the correlation signal is contaminated with the background contributions due to the collective motion (flow) of the collision system, and it remains elusive to effectively remove the background from the correlation. In this poster, we present a method study with a simple Monte Carlo simulation and the AMPT model [2]. We develop a scheme to reveal the true CME signal via the event-shape engineering with the magnitude of the flow vector,  $Q$ : the flow-background is removed at  $Q = 0$ . Artificial signal/background effects will also be discussed. [1] D. E. Kharzeev, L. D. McLerran and H. J. Warringa, Nucl. Phys. A **803**, 227 (2008). [2] Z.W. Lin and C.M. Ko, Phys. Rev. C **65**, 034904 (2002).

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