to anomalous triangle diagram which gives a coefficient of 5/9 to the 2-flavour CME but 2/3 for the 3-flavour CME [22]. It results in a relative CME current difference of 1/6 between 2-flavour and 3-flavour cases. However, because the traditional experimental observable γ of charge azimuthal correlation include all inclusive charged hadrons, it limits ones to measure the relative difference. Recently, the ALICE collaboration measured the identified hadron triggered charge azimuthal correlation, e.g. kaon-hadron correlation, which enable us to access the flavour property of the CME [23]. Another advantage of kaon-hadron correlation is that it can avoid the contamination from ρ meson decay, which presumedly play a significant influence on the CME observable [24]. In this work, we implement a multiphase transport (AMPT) model to investigate the flavour dependence of the CME. In our previous work, we imported the initial CME-like dipole charge separation to the AMPT model with a constant separation percentage, and found that though the original AMPT model can reproduce 60-70% magnitude of the CME observable γ in Au+Au collisions at 200 GeV, an initial charge separation percentage of $\sim$ 10% is needed to closely match the STAR data, and demonstrate that final state interactions strongly suppress the initial CME effect [25]. In this work, we will improve our method to study the γ correlators in Pb+Pb collisions at 2.76 TeV, by taking two following improvements into account. Firstly, we use a centrality-dependent charge separation percentage which is assumed to be proportional to the magnitude of magnetic field in Pb+Pb collisions, which is more reasonable for simulating the CME. Secondly, we consider both 2-flavour and 3-flavour cases for the initial charge separation to mimic the 2-flavour and 3-flavour CME effect, while we only considered two flavours of quarks (u and d) in our previous work [25].

This paper is organized as follows. We give a short introduction of our model and the method to introduce the 2-flavour and 3-flavour dipole charge separations in Sec. . In Sec. , we present our simulation results and expand some discussions. Finally, we summarize in Sec. .

II. THE AMPT MODEL

We implemented the AMPT model with string meting mechanism in this study [26]. The AMPT model, which is a Mote Carlo hybrid transport model, includes four main stages of Relativistic heavy-ion collisions, i.e initial condition, parton cascade, hadronization, and hadronic rescatterings. The initial condition, which includes the spatial and momen-