Directed flow of pions, kaons and protons in Au+Au collisions at $\sqrt{s_{NN}}$ = 54.4 GeV in STAR

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Rapidity-odd component of directed flow (v_1) measurement at various beam energy gives a new insight on the properties of the medium created in heavyion collisions. Both hydrodynamic and nuclear transport models indicate that $v_1(y)$ is sensitive to the details of expansion during the early stages of collision fireball. In this poster, we will present directed flow (v_1) as a function of rapidity of identified particles $(\pi^+, \pi^-, K^+, K^+, p \text{ and } \bar{p})$ at 54.4 GeV in Au+Au collisions at RHIC-STAR. The $v_1(y)$ slope will be discussed and compared with results from Beam Energy Scan I.