

Nuclear Theory

The flow of heavy flavor in hydrodynamics

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The flow of charm is calculated in 2+1 ideal hydrodynamics by introducing the charge of \bar{c} pair assuming that the number of \bar{c} pairs is conserved in relativistic heavy-ion collisions. It is found that the mean radial flow velocity of charm quarks is smaller than that of bulk matter by 10% and the measured v_2 of heavy-flavor electrons is reproduced up to $p_{T^e} = 1.5$ GeV/c in Au+Au collision at RHIC. The same flow is applied to regenerated J/ψ and its v_2 is discussed.

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