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Transverse Flow of Kaons in Heavy-Ion Collisions

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Abstract. The transverse flow of positively charged kaons from heavy-ion collisions at intermediate energy is investigated within the framework of the quantum molecular dynamics model. The calculated results show that the experimental data are only consistent with those including the kaon mean-field potential from the chiral Lagrangian. This indicates that the transverse flow pattern of kaons is a useful probe of the kaon potential in a nuclear medium.

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