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# Anisotropic flow in Au + Au collision at 1 A GeV by using Quantum Molecular Dynamics Model

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Anisotropic flow in Au + Au collision at 1 A GeV using a quantum molecular dynamics model was concentrated. The direct flow of proton ($v_1$) as a function of rapidity ($y_0$) at intermediate energy around 1 A GeV and impact parameter from 0.25 to 0.45 fm with the nuclear equation of state (soft and hard equation of state) were computed and compared with FOPI experiment. The results showed that the direct flow of proton as a function of the rapidity with a soft equation of state was consistent with the FOPI data. The behavior of the nuclear equation of state at high temperature and high density could be explained by the calculation result of the proton flow from Au + Au collision at intermediate energy.

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