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Rapidity Dependence of Pion Elliptic Flow at RHIC S.J. SANDERS, E. JOHNSON, U. Kansas, H. ITO, Brookhaven National Lab., BRAHMS COLLABORATION — The measured elliptic flow (v_2) of identified particles as a function of p_t and centrality at RHIC suggests the created medium in Au+Au collisions achieves early local thermal equilibrium that is followed by hydrodynamic expansion. These measurements of identified particle v₂ have been limited, however, to a narrow region about mid-rapidity. Charged-hadron v₂ measurements show a significant reduction at forward pseudorapidities. It is not known if this η dependence is a general feature of elliptic flow, or reflects other changes in the particle spectra in going to the forward region. The BRAHMS experiment provides unique capabilities to measure v₂ at forward rapidities. Using the BRAHMS multiplicity array to determine the v₂ event plane, identified particle elliptic flow can be measured using the BRAHMS spectrometers, with $0 \le \eta \le 3.4$. This talk will discuss pion elliptic flow at $\eta=0,\,1,\,2.7$ and 3.4 from Run 4 Au+Au collisions at $\sqrt{s_{NN}}$ =200 GeV. In addition, the p_t integrated flow for charged hadrons obtained using just the multiplicity array will be presented. This work was supported by the Office of Nuclear Physics of the U.S. Department of Energy.

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