

Abstract Submitted  
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**Pseudorapidity and  $p_t$  dependence of identified-particle azimuthal flow for  $\sqrt{s_{NN}} = 200$  GeV Au+Au and Cu+Cu collisions<sup>1</sup>** VICTORIA ZHUKOVA, U. Kansas, BRAHMS COLLABORATION — The observation of a strong azimuthal flow signature at RHIC suggests rapid system equilibration leading to an almost perfect fluid state. The longitudinal extent of the flow behavior depends on the formation dynamics for this state and can be studied by measuring the pseudorapidity dependence of the second Fourier component ( $v_2$ ) of the azimuthal angular distribution. We report on a measurement of identified-particle  $v_2$  as a function of  $p_t$  (0.5-2.0 GeV/c), centrality (0-50%), and pseudorapidity ( $0 \leq \eta < 3.2$ ) for  $\sqrt{s_{NN}} = 200$  GeV Au+Au and Cu+Cu collisions. The results are obtained using the BRAHMS spectrometers for particle identification ( $\pi$ , K, p) and the BRAHMS global detectors to determine the corresponding reaction-plane angles. Preliminary results for the Au+Au system have been reported earlier. Here we compare the final Au+Au results to new results obtained for the Cu+Cu system.

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