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System-size and energy dependence of elliptical flow RICHARD BINDEL, University of Maryland, PHOBOS COLLABORATION — Azimuthal correlations are proving to be an extraordinarily powerful tool in elucidating the initial conditions and dynamical evolution of matter created in relativistic heavy ion collisions. As our theoretical vision of heavy ion collisions evolves, differential flow measurements are providing both guidance and strong constraints. This work examines the elliptic flow as a function of pseudorapidity, centrality, transverse momentum, energy, and species. The data presented were taken with the PHOBOS experiment at RHIC during Au-Au and Cu-Cu collisions ranging over an order of magnitude in energy. The implications of these data on the source initial conditions and dynamics will be discussed.

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