Elliptic Flow Measurements with the PHENIX Detector System

Roy A. Lacey for the PHENIX Collaboration

Chem Dept., SUNY Stony Brook, for the PHENIX Collaboration

Presented by: R. Lacey

Abstract

Systematic measurements of elliptic flow have been used extensively to investigate the equation of state at AGS and SPS energies. At RHIC energies, elliptic and higher order flow is also predicted to serve as an important probe of nuclear matter produced at high energy densities [1]. The PHENIX collaboration has measured elliptic flow in 130 A*GeV Au+Au collisions using a technique based on azimuthal angular correlations. First results for several impact-parameter and transverse-momentum selections will be presented in conjunction with the flow-measuring capabilities of the PHENIX detector system.

[1] Teaney and Shuryak PRL 83, 4951, (1999)