

GENERAL CHARACTERISTICS OF HEAVY ION COLLISIONS AT THE ENERGY OF 14.6A GEV

M. AYAZ AHMAD, SHAFIQ AHMAD^a AND MIR HASHIM RASOOL^b

^a Department of Physics, Faculty of Science, Tabuk University, P. O. Box-741, Saudi Arabia, K. S. A.

^b Physics Department, Aligarh Muslim University, Aligarh – 202002, India.

Abstract

The experimental results on the general characteristics of heavy ion collisions in the interactions of ^{28}Si nuclei at 14.6A GeV with nuclear emulsion are reported for black, grey, and heavily ionizing particles. A modest attempt has been made to study of mean free path and the interaction with different targets, various multiplicity distributions along with some multiplicity correlations of produced secondary charged particles in heavy ion collisions. Finally a simplified method of multiplicity distribution of relativistic shower charged particles and mean multiplicities of various charged particles produced in heavy ion collisions at high energies have been used to represent the experimental data.

Keywords: Relativistic heavy ion collisions, multiplicity distribution and correlations.

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