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INTEGRAL FREQUENCY AND RAPIDITY GAP DISTRIBUTIONS OF SCONDARY CHARGED PARTICLES PRODUCED IN HEAVY ION COLLISIONS AT HIGH ENERGIES

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Abstract

In this paper we have made an approach to study various distributions of relativistic shower charged particles produced in the collisions of ^{12}C and ^{28}Si (projectile nuclei) with the target nuclei of nuclear emulsion at an energy of 4.5A GeV . An attempt has been made to present few valuable remarks on the integral frequency distribution, normalized single particle exclusive distributions so called pseudorapidity distribution and rapidity gap distributions. This work has been compared with other experimental high energy physicists and found the same pattern for the underlying mechanism of multiparticle production in high energy heavy ion collisions.

Key Words : *Heavy Ion Collisions (HICs), Integral multiplicity distribution, Pseudo rapidity distribution and Multiparticle production.*

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