

COMPARATIVE STUDY OF DIFFERENT MULTIFRACTAL MOMENTS IN THE SPECTRUM OF PRODUCED PARTICLES IN ^{32}S -AG/BR INTERACTION AT 200 A GEV/C

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ABSTRACT

The fractal nature of non-statistical fluctuations in the density distribution of singly charged particles produced in ^{32}S -Ag/Br interactions at an incident momentum of 200 A GeV/c has been investigated under the frame work of Hwa's multifractal moments, Takagi's Multifractal moments and multifractal detrended fluctuation (MDFa) analysis. The experimental data have been collected by using the nuclear photographic emulsion technique. All results obtained experimental data is analyzed and have been compared with the simulated results.

KEYWORDS: *Nucleus-Nucleus Collision, Fluctuations, Long Range Correlation, Multifractal Moments*

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