Turkish Journal of Physics

Features of the Compound Multiplicity of the Interactions of ²⁴Mg and ²⁸Si lons with Emulsion Nuclei at 4.5A GeV/c

Turkish Journal

of

Physics

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Abstract: The present paper deals with the interactions of ²⁴Mg and ²⁸Si nuclei at 4.5A GeV/c with emulsion. Some characteristics of the compound multiplicity given by the numerical sum of grey and shower particles have been investigated. The obtained results indicate that the compound multiplicity distribution is consistent with KNO-Scaling and its width increases with the size of the projectile nucleus. The dependence of the average compound multiplicity on the numbers of black and the grey particles and the sum of them is obvious and the values of the slope has been found to be independent of the projectile nucleus.

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Turk. J. Phys., **25**, (2001), 109-119. Full text: <u>pdf</u> Other articles published in the same issue: <u>Turk. J. Phys.,vol.25,iss.2</u>.

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