

PRODUCTION OF PROTONS IN
(^{16}O p)-COLLISIONS AT 3.35A GeV/s

*B. S. Yuldashev, E. I. Ismatov, M. I. Fazylov,
E. Kh. Bazarov¹, V. V. Glagolev¹, K. G. Gulamov¹,
V. D. Lipin¹, S. L. Lutpullaev¹, K. Olimov¹,
A. A. Yuldashev¹, Kh. Sh. Khamidov¹, Sh. Kh. Djuraev²*

Institute of Nuclear Physics, Acad. Sci. of Uzbekistan,

¹Physical Technical Institute SIC "Physics-Sun",
Acad. Sci. of Uzbekistan,

²Termez State University

S u m m a r y

For the first time, the analysis of the momentum characteristics of proton-fragments produced in (^{16}O p)-collisions at 3.25 A GeV/s under the conditions of total geometry is carried out. The universal nature of the production of protons is found. The production of protons (except for 'evaporation' protons) moving forward in the rest frame of fragmenting nuclei does not depend on the initial energy and the type of a target-nucleus ("nuclear scaling"). The existence of strong correlation between the form of the pulse spectrum of proton-fragments and the excitation rate of the fragmenting nucleus, especially for slow protons, is shown.