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Centrality Dependence of Multistrange and Strange Antibaryon Production in Heavy-Ion Collisions at High Energies

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We consider the experimental data on yields of protons, strange Λ 's, and multistrange baryons (Ξ , Ω), and antibaryons production on nuclear targets, and the experimental ratios of multistrange to strange antibaryon production, at the energy region from SPS up to LHC, and compare them to the results of the Quark-Gluon String Model calculations. In the case of heavy nucleus collisions, the experimental dependence of the Ξ +/ Λ , and, in particular, of the Ω +/ Λ ratios, on the centrality of the collision, shows a manifest violation of quark combinatorial rules.

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