

PARTICLE IDENTIFICATION IN THE DYNAMICAL STRING-PARTON MODEL OF RELATIVISTIC HEAVY-ION COLLISIONS¹

D. E. Malov², A. S. Umar², D. J. Ernst², D. J. Dean

The dynamical string-parton model for relativistic heavy-ion collisions is generalized to include particle identification of the final-state hadrons by phenomenologically quantizing the masses of the classical strings which result from string breaking. General features of the Nambu-Gotō strings are used to motivate a model that identifies a mass window near the physical mass of a meson, and does not allow the string to decay further if its mass falls within the window. Data from e^+e^- collisions in the region $\sqrt{s} = 10$ to 30 GeV are well reproduced by this model.

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²Vanderbilt University, Nashville, TN.