LOW-MASS DIFFRACTION DISSOCIATION AT THE LHC. ROLE OF THE BACKGROUND

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S u m m a r y

A dual model with a nonlinear proton Regge trajectory in the missing mass (M_X^2) channel is constructed. A background based on a direct-channel exotic trajectory, developed and applied earlier for the inclusive electron-proton cross section description in the nucleon resonance region, is used. The parameters of the model are determined from the extrapolations to earlier experiments. Predictions for the low-mass $(2 < M_X^2 < 8$ GeV^2) diffraction dissociation cross sections at the LHC energies are given.