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Stochastic model of Rayliegh-Taylor turbulent mixing S.I. ABARZHI, Chicago, M. CADJAN, S. FEDOTOV, The University of Manchester, UK — We propose a stochastic model to describe the random character of the dissipation process in the Rayleigh-Taylor turbulent mixing. The parameter alpha, used conventionally to characterize the mixing growth-rate, is not a universal constant and is very sensitive to the statistical properties of the dissipation. The ratio between the rates of momentum loss and momentum gain is the statistic invariant and a robust parameter to diagnose with or without turbulent diffusion accounted for.

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