

The numerical study of Richtmyer-Meshkov instability at the interface of two gases with the same densities

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Abstract.

Earlier it was shown [1], that the Richtmyer-Meshkov instability is developed at the interface of two gases with the same initial densities but different adiabatic indexes.

We have carried out the numerical researches of the peculiarities of such type of instability using the numerical code "NUT" [2]. We have modeled the different cases of shock wave transition through the interface and influence of different boundary conditions.

1. Lebo I.G.&Tishkin V.F. (2006). Issledovanie gidridinamicheskoy neustojchivosti v zadachah lasernogo termojadernogo sinteza. Monograph, Moscow, FIZMATLIT, (in Russian)
2. Nikishin V.V. et al. (1995), Matematicheskoe modelirovanie. v.7, p.15, (in Russian)