

Effect of magnetic field on Richtmyer-Meshkov instability

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Abstracts:

We study the fluid instability using potential flow model with appropriate boundary conditions. For that we have changed an appropriate term in Goncharov's [PRL-2002] paper. Richtmyer-Meshkov instability (R-MI) plays an important role in ICF and laser-matter interaction. Scientists and engineers have a great attention in this field. In our recent work we study the temporal development of nonlinear interfacial structure caused by RM instability. The nonlinear structure is called bubble and spike. An interesting stabilization will be occurs if both the fluid containing the magnetic field.

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