



## Front growth and local mixing

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The instability produced

if a shock or sudden acceleration takes place is known as Richtmyer-Meshkov (RM) instability. Front advance and mixing is studied analyzing mixedness,[2] the third order structure functions, that indicate strong inverse cascades towards the large scales producing spectral variations[3]. The mixing processes are compared by mapping the different intermittency and the multifractal scaling in the spike and bubble arrays

[1] Redondo J.M. and Garzon G. (2004) Multifractal structure and intermittency in Rayleigh-Taylor Driven Fronts. Ed. S. Dalziel  
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[2] Redondo, J.M. and Cantalapiedra I.R. (1993) Mixing in Horizontally Heterogeneous Flows. Jour. Flow Turbulence and Combustion. 51. 217-222.

[3] Castilla R, Babiano A. and Redondo J.M. (2009) Coherent vortices and Lagrangian Dynamics in 2D Turbulence. Non-Linear Processes in Geophysics