



Velocity measurements in turbulent shocks

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High resolution velocity measurements using Doppler Velocimetry are used to investigate the development of baroclinic induced turbulence as a pressure shock traverses a density interface. The measurements and visualizations of the shock advance show the differences between Richtmyer-Meshkov induced turbulence from light to heavy densities and viceversa. (Poggi(1995) and Swarleader(2000) CEA, Univ. Provence PhD Thesis) Show the relationship between temperature and local velocity and the effect of re-shocks. The highly non-stationary turbulent bursts are analyzed evaluating the gradients of higher order moments and structure functions of the velocity.