Abstract Submitted
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A Mach number study of Richtmyer-Meshkov instability and growth rates of a shocked gas column[1] GREGORY ORLICZ, BALAKUMAR BALASUBRAMANIAM, CHRISTOPHER TOMKINS, KATHERINE PRESTRIDGE, Los Alamos National Laboratory — Presented are density field measurements of a column of SF6 impacted by shocks of varying Mach number greater than and equal to Mach 1.2. This has been made possible through a new capacity of the shock-tube to utilize steel diaphragms for shock generation. The initial conditions are those of a diffuse column of SF6 surrounded by air. Both the initial conditions and the evolution of the structure following shock impact are imaged via planar laser induced fluorescence (PLIF). We present a preliminary study of integral growth rates and their dependence on Mach number.

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