

Abstract Submitted
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Time-resolved Particle Image Velocimetry measurements of the 3D random Richtmyer-Meshkov Instability. EVEREST SEWELL, VITALIY KRIVETS, JEFFREY JACOBS, Univ of Arizona — The vertical shock tube at the University of Arizona is used to perform experiments on the multi-mode three-dimensional Richtmyer-Meshkov Instability (RMI). An interface of air and sulfur hexafluoride is formed in a counter flow configuration, and is excited using voice coils to produce faraday-like multi-modal perturbations. This interface is shock accelerated by an approximately Mach 1.2 shockwave to form the RMI. Time resolved Particle Image Velocimetry (PIV) is used to perform analysis of the evolving instability.

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