

Abstract Submitted
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Shock Driven, Discrete Vortices on Oblique Interfaces¹ A.M. RASMUS, C.A. DI STEFANO, F.W. DOSS, K.A. FLIPPO, E.C. MERRITT, D.W. SCHMIDT, A.P. STRICKLAND, Los Alamos National Laboratory, C.C. KURANZ, University of Michigan — A shock incident on an interface between two materials will deposit baroclinic vorticity. This vorticity will typically cause any perturbations on the pre-shock interface to grow. The vorticity distribution along the post-shock interface often determines which process dominates the post-shock evolution. Here, we will show that growth dominated by discrete vortices arises from the interaction of a supported shock with a staircase perturbation. We will present theory, xRAGE simulations, and preliminary experimental results in support of this result.

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Alexander Rasmus
Los Alamos National Laboratory

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