## Abstract Submitted for the SES08 Meeting of The American Physical Society

Effects of fluid instabilities in three-dimensional SNR structure DON WARREN, JOHN BLONDIN, North Carolina State University — The Chandra X-Ray Observatory has provided spectacular high-resolution views of the shocked ejecta in young supernova remnants like Tycho. We use large-scale three-dimensional simulations to investigate the hypothesis that the spatial structure seen in these images is attributable to the fluid instabilities at the interface between shocked ejecta and shocked circumstellar gas. Simulations were run on the University of Texas' Ranger supercomputing cluster, over many expansion times, on grids of  $\sim 500\text{-}1000$  zones on a side.

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