

Abstract Submitted
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Magnetohydrodynamic modelling of exploding foil initiators

WILLIAM NEAL, None — Magnetohydrodynamic (MHD) codes are currently being developed, and used, to predict the behaviour of electrically-driven flyer-plates. These codes are of particular interest to the design of exploding foil initiator (EFI) detonators but there is a distinct lack of comparison with high-fidelity experimental data. This study aims to compare a MHD code with a collection of temporally and spatially resolved diagnostics including PDV, dual-axis imaging and streak imaging. The results show the code's excellent representation of the flyer-plate launch and highlight features within the experiment that the model fails to capture.

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None

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