

Abstract Submitted
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High Speed Imaging of Sheet Breakup Dynamics via Wide Angle Optical Scattering¹ JOHNNY GOETT, JOHN CHARONKO, WILLIAM BUTLER, Los Alamos National Laboratory, MICHAEL GROVER, BRANDON LALONE, JASON MANCE, MSTS Special Technologies Laboratory, RUBEN MANZANARES, JOHN MARTINEZ, DEREK SCHMIDT, Los Alamos National Laboratory, GERALD STEVENS, WILLIAM TURLEY, MSTS Special Technologies Laboratory — We report on the observation of liquid metal sheet breakup in high pressure gases via the method of wide angle scattering of optical light. Utilizing multi-pulse laser systems and ultra-high speed framing cameras we reveal the evolution of periodic structures previously unseen in transmission radiography and shadowgraphy probes. A quantitative interpretation of results and comparison with popular phenomenological models will be included.

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