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Liquid Cu Rayleigh Taylor Experiments¹ SHON PRISBREY, JAMES MCNANEY, CHRISTOPHER E. WEHRENBERG, CHANNING M. HUNTINGTON, HYE-SOOK PARK, ANTHONY ARSENLIS, Lawrence Livermore Natl Lab — The deviation of Rayleigh Taylor growth from the predicted classical (liquid) growth has been used to infer the strength of solid materials. Some of the most recent work has been done using laser platforms which achieve high pressures and high strain rates where the deviation from liquid growth is assumed to be correct. We will present experimental and simulation results comparing the growth of shock-melted, liquid Cu samples at similar time scales (10's of ns) and strain rates (>10^6/s) for recent experiments carried out at the Omega laser facility.

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