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Radiation Transport Through Inhomogenous Materials PAUL KEITER, MARK GUNDERSON, Los Alamos National Laboratory, JOHN FOSTER, PAULA ROSEN, MARK TAYLOR, AWE Aldermaston — Calculations of radiation transport in heated materials are greatly complicated by the presence of regions in which two or more materials are inhomogeneously mixed. We describe laboratory experiments to test modeling of radiation transport through inhomogeneous plasmas. A laser-heated hohlraum is used as a thermal source to drive radiation through a polymer foam containing randomly-distributed gold particles. We present experimental measurements of the radiation transport through different foam/gold particle mixtures. Simulation results will also be compared to the experimental results.

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