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Simulation of Stimulated Raman Scattering from Gas-filled Hohlräume RICHARD BERGER, L. DIVOL, R.A. LONDON, D.H. FROULA, L.J. SUTER, P. MICHEL, S. DIXIT, S.H. GLENZER, Lawrence Livermore National Laboratory — A series of experiments performed at Omega Laser Facility have measured the stimulated Raman and Brillouin backscatter and beam spray of 351nm laser light from gas-filled hohlraums at electron densities from $.06 N_c$ to $0.13 N_c$ and electron temperature about 3 keV. Experiments with similar plasma conditions were reported recently (Froula *et al.*, Phys. Plasmas, **14**, 055705, 2007 and Meezan, *et al. ibid*, 056304). The experiments were designed to have convective gains for SRS between 5 and 30. The gain was varied with the laser intensity and the fill density. Above $.09 N_c$ the simulated and measured backscatter is predominately SRS. PF3D simulations will be presented that compute the effects of SSD and polarization smoothing on the onset intensity for significant reflectivity ($R > 1\%$) as well as the intensity and density scaling of the scatter. The simulated and measured reflectivity and beam spray will be compared. .

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