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Radiation Transport in Saturn Targets Used for Polar Direct Drive R.S. CRAXTON, F.J. MARSHALL, M.J. BONINO, S.G. NOYES, V.A. SMALYUK, Laboratory for Laser Energetics, U. of Rochester — Saturn targets, spherical capsules placed within an equatorial low-Z ring, are of interest for polar-direct-drive ignition experiments on the NIF using just the indirect-drive beam ports. Radiation from the ring to the capsule is calculated using a new, view factor-like radiation transport model in the 2-D hydrocode *SAGE* that includes full directional and spectral information. This model provides improved agreement with experimental measurements on OMEGA of the drive uniformity of Saturn targets with a CH ring and a deuterium-filled CH capsule. This work was supported by the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-FC52-92SF19460.

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