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Prediction of double shock formation by exploding high gain ICF target in Xe gas filled chamber RYAN SACKS, GREGORY MOSES, University of Wisconsin Madison — The spherical micro-explosion of a 132 MJ high gain indirect drive target radiating and expanding into a surrounding 6μg/cc Xe atmosphere is simulated in 1D using the BUCKY radiation hydrodynamics code with 121 group FAC Xe opacities and equations of state.[1] An interesting double shock is formed by the Marshak wave and exploding target debris. Explanation of this double shock formation is presented. This research is supported by Lawrence Livermore National Laboratory.

[1]Private communications with Howard Scott, LLNL.

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