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Advantages for a Beryllium Capsule Design for Indirect Drive Inertial Confinement Fusion¹ J.L. KLINE, A.N. SIMAKOV, D.C. WILSON, S.A. YI, LANL, J.D. SALMONSON, D.S. CLARK, J.L. MILOVICH, M.M. MARI-NAK, D.A. CALLAHAN, S.W. HAAN, M.J. EDWARDS, LLNL, A. NIKROO, H. HUANG, K. YOUNGBLOOD, General Atomics — While much progress has been made towards ignition with plastic (CH) ablators, many challenges remain. Alternate ablators, such as Beryllium, could advance our progress more quickly since these ablators are more efficient. In the case of Beryllium, the lower opacity and higher mass ablation rate leads to higher implosion velocities for the same xray drive. Strategically, comparing and contrasting experimental results for different ablators will provide needed information to determine which material is the best option for achieving ignition. This presentation will be the first in a series of four to outline an updated Beryllium ablator design for ignition experiments. The focus here will be on the advantages, challenges, and path forward for a Beryllium ablator design.

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J. L. Kline LANL

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