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Recent developments in ab initio equations of state for ICF applications LORIN BENEDICT, Lawrence Livermore National Laboratory — I present a brief review of recent work that we at Lawrence Livermore National Laboratory have conducted on the development of accurate EOS models for DT fuel, as well as for two candidate ablator materials: Glow Discharge Polymer, and diamond. Emphasis will be placed on the use of ab initio electronic structure methods in producing data with which the EOS models are fit, as well as details of the EOS models themselves. Also discussed is the use of a variety of experimental data in the validation of these models.

Lorin Benedict Lawrence Livermore National Laboratory

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