

Abstract Submitted
for the DPP11 Meeting of
The American Physical Society

LMJ ignition target, evolutions and fabrication developments

MARC THEOBALD, JOHAN ANDRE, OLIVIER BRETON, CÉDRIC CHICANNE, ISABELLE GEOFFRAY, SYLVAIN LE TACON, FRÉDÉRIC DURUT, EMMANUEL FLEURY, GHISLAIN PASCAL, OLIVIER LEGAIE, CEA Valduc, CEA VALDUC TARGET DEPARTMENT TEAM — In order to prepare Inertial Confinement Fusion (ICF) experiments on the “Laser Megajoule” (LMJ) facility in France, CEA has developed for more than a decade a large amount of specific targets which generally meet very strict specifications. More over, target fabrication technologies have improved a lot in the world during these last few years, particularly to prepare and realize experiments on new facilities (NIF and LMJ). The development of new fabrication technologies in CEA, has allowed making new cryogenic targets, compatible with a very good thermal control, necessary for the experiments. In this presentation, a focus on the state of the art on the LMJ cryogenic target fabrication is exposed. Design evolutions are presented to obtain best compromise between target fabrication and physics requirements to achieve ICF experiments.

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Date submitted: 23 Jun 2011

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