Abstract Submitted
for the DPP06 Meeting of
The American Physical Society

2D low energy LMJ target design STEPHANE LAFFITE, STEPHANE LIBERATORE, CEA — Achieving ignition is one of the objective of the "Laser MegaJoule" (LMJ). Several indirect drive were designed to reach ignition with this laser. In an indirect drive configuration, laser light is converted to X-rays in a high-Z, typically gold, hohlraum. The resulting radiative energy drives the implosion of the central cryogenic DT capsule. Inside the hohlraum, a low density gas, for example H-He mix, retains the gold blowoff. The LMJ will deliver up to 2 MJ and 550 TW. A 1.4 MJ ignition target has already been designed. We present here the 2D design of a smaller target which requires 1 MJ and 300 TW of laser energy and power. This target could be shot during pre-ignition campaigns. Then, we compare both targets. In the smaller one, optimizing the beam passage through the laser entrance holes and tuning the radiation symmetry have become a real issue. Especially, we study the influence on radiation symmetry of H-He gas density.

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Date submitted: 12 Jul 2006 Electronic form version 1.4