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**Timing Sensitivity of Ignition Capsules to Hot Electrons** DONALD MEEKER, LAURANCE SUTER, STEVE HAAN, HARRY ROBEY, LLNL — Under certain conditions approaching those expected in NIF hohlraums, the laser drive in ICF targets may produce hot electrons that can preheat the DT ice inside the ignition capsule. In addition to causing an increase in fuel entropy that directly reduces margin, the preheat can also change the optimal shock timing. The effect of the hot electrons is dependent on the time of creation of these electrons relative to the main laser drive. The capsules are most sensitive to electrons occurring very early in the pulse and are least sensitive to hot electrons created at peak laser power. The behavior of the capsule affected by the electron preheat will be discussed as well as methods to minimize their effect. This work performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

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