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**Laser ablation and target acceleration under the strong magnetic field**[1] H. NAGATOMO, K. MATSUO, ILE Osaka University, J. BREIL, P. NICOLAI, J-L. FEUGEAS, CELIA, Université Bordeaux 1, T. ASAHINA, ILE Osaka University, A. SUNAHARA, Institute for Laser Technology, T. JOHZAKI, Hiroshima University, S. FUJIOKA, T. SANO, ILE Osaka University, K. MIMA, Graduate School for the Creation of New Photonics Industries — Various discussion and experiments have been made about the laser plasma phenomena under the strong magnetic field recently. One of the advantage is guiding electron beam for heating core plasma in last phase of Fast Ignition scheme. However, the implosion dynamics in FI is influenced by the magnetic field due to the anisotropic of electron heat conduction [1]. Some simple experiments where target is accelerated by laser driven ablation under the strong magnetic field were conducted to benchmark the simulation code. Related to the experiment, we focus on the early stage of the acceleration in this study. 2-D radiative MHD code (PINOCO-MHD) is used for the simulation. In the simulation magnetic field transport, diffusion and Braginskii coefficient for electron heat conduction are taken account. In preliminary simulation result suggests that the magnetic pressure may have an influence on the target surface and/or ablated plasma at very early phase. The effect of the magnetic pressure is very sensitive to the vacuum, initial and boundary conditions, and they should be treated carefully. These numerical conditions will be discussed as well.

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