Abstract Submitted for the DPP17 Meeting of The American Physical Society

Inverse Bremsstrahlung momentum absorption and current drive¹ VADIM MUNIROV, NATHANIEL FISCH, Princeton Univ — The generation of the plasma current resulting from Bremsstrahlung absorption is considered. It is shown that the electric current is higher than the naive estimates assuming that electrons absorb only the photon momentum and using the Spitzer conductivity would suggest, both because electrons get the recoil momentum from the Coulomb field of ions during the absorption and because electrons absorb power asymmetrically, which leads to the current drive effect.

¹Work is supported by DOE Contract No. DE-AC02- 09CH1-1466.

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Date submitted: 14 Jul 2017

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