Abstract Submitted for the DPP13 Meeting of The American Physical Society

Experimental Evidence of Multiple Double Layer in a Helicon Antenna Produced Plasma PRABAL KUMAR CHATTOPADHYAY, KSHI-TISH BARADA, J. GHOSH, DEVENDRA SHARMA, Y.C. SAXENA, Institute for Plasma Research — A strong current free double layer has been observed in an geometrically and magnetically expanding helicon antenna produced plasma. Double layer strength is shown to increase with magnetic field gradient near the geometrical boundary. However, further increases of magnetic field degrade DL strength before finally increases again with the occurrence of multiple double layers. The detail measurement of DL strength, position along with plasma density will be presented.

> Prabal Kumar Chattopadhyay Institute for Plasma Research

Date submitted: 12 Jul 2013

Electronic form version 1.4