## Abstract Submitted for the DPP99 Meeting of The American Physical Society

Sorting Category: 5.1.1.2 (Experimental)

Dependence of ELM Energy Distribution in Doublenull Discharges on Up/Down Magnetic Balance in DIII-D<sup>1</sup> C.J. LASNIER, Lawrence Livermore National Laboratory, A.W. LEONARD, T.W. PETRIE, General Atomics, J.G. WATKINS, Sandia National Laboratories — In this study we show the effect on ELM divertor heat flux of changing continuously from a lower single null to an upper single null discharge. The up/down split of ELM deposited energy on the divertor plates is well controlled by adjusting the relative locations of the flux surfaces on which the upper and lower magnetic nulls lie. The distance between these surfaces at the outer midplane  $(D_{sep})$  is changed to adjust the magnetic balance. (For a magnetically balanced discharge  $D_{sep} = 0$ .) We examine the effect of adjusting  $D_{sep}$ on the width and location of the ELM deposited energy profiles in both divertors. The scale length of  $D_{sep}$  changes which affect the heat flux is similar to the heat flux scrape-off width at the outer midplane.

<sup>1</sup>Supported by U.S. DOE Contracts W-7405-ENG-48, DE-AC03-99ER54463, and DE-AC04-94SL85000.



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Special instructions: DIII-D Poster Session 2, immediately following AW Leonard

Date printed: September 7, 1999

Electronic form version 1.4