

**Abstract Submitted for the 53rd Annual Meeting  
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Category Number and Subject: 5.6.2. DIII-D Tokamak

Theory       Experiment       Combined/General

**RMP ELM Suppression with a Single Row of Coils in DIII-D,\*** J.S. deGrassie, R.J. Buttery, T.E. Evans, M.R. Wade, *General Atomics*; M.E. Fenstermacher, *Lawrence Livermore National Laboratory*; R.A. Moyer, D. Orlov, *U. California-San Diego*, R. Nazikian, *Princeton Plasma Physics Laboratory*; O. Schmitz, *Forschungszentrum Juelich, Juelich, Germany* — ELM suppression with  $n=3$  resonant magnetic perturbations (RMPs) has been obtained in DIII-D with a single row of coils, at one poloidal angle, but was investigated using only the same dominant window in  $q_{95}$  as used for the standard two row suppression [1]. However, the single row imposes a richer density of spectral components as compared with the double row. Further experiments have been done with the single row to compare the efficacy of ELM suppression and the location and width of resonant windows in  $q_{95}$  for suppression. We present calculations of the single row vacuum field resonances in  $q_{95}$  and compare with experimental results.

[1] M.E. Fenstermacher *et al.*, Nucl. Fusion **48**, 122001 (2008).

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