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RMP ELM Suppression with a Single Row of Coils in DIII-D¹ 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 Plasmas 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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