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3D DIII-D Equilibrium Calculations with Magnetic Islands¹ ALLAN REIMAN, DON MONTICELLO, SAM LAZERSON, Princeton Plasma Physics Lab — We discuss 3D equilibrium calculations for the DIII-D tokamak that have been performed using the PIES code, focusing particularly on a single shot that has been studied by a number of different codes in the context of the FY 2012 FES Theory Milestone. The shot was part of an experimental campaign to study the suppression of edge localized modes (ELMs) using an externally imposed nonaxisymmetric magnetic perturbation.

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