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V3FIT: Three-Dimensional MHD Equilibrium Reconstruction
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KNOWLTON, Auburn University — V3FIT is a three-dimensional MHD equilib-
rium reconstruction code, based on the VMEC equilibrium code. V3FIT is a general
and easily extensible reconstruction code, designed so that information from many
types of diagnostics can be used to determine the equilibrium. The first diagnostics
included in V3FIT were magnetic diagnostics. We will present results on recon-
struction using microwave interferometers and polarimeters as diagnostics. We will
also show comparisons between V3FIT and EFIT reconstructions using experimen-
tal data from the DIII-D tokamak. This work is supported in part by US DOE
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