

Three-Dimensional Equilibrium Reconstruction: V3FIT Status and Prospects

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Equilibrium Reconstruction (ER) is the process of using experimental data to determine the MHD equilibrium properties of a confined plasma. The axisymmetric ER code EFIT has proven especially helpful for the improved operation and interpretation of tokamak plasmas. The V3FIT code is a non-axisymmetric ER code that uses the three-dimensional equilibrium solver VMEC. Results showing the reconstruction of stellarator equilibria (using simulated observations) and axisymmetric DIII-D equilibria (using experimental observations) will be shown. Prospects for future development of the code will be discussed.

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