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Recent progress in the developments of the free-boundary version of the SIESTA 3D MHD equilibirum code RAUL SANCHEZ, JOSE MIGUEL REYNOLDS-BARREDO, Carlos III University of Madrid — SIESTA [Hirshman, Sanchez and Cook, Phys.Plasmas **18**, 062504 (2011)] is a 3D MHD equilibrium code designed to perform fast and accurate calculations of ideal MHD equilibria for three-dimensional magnetic configurations. It is an iterative code that uses the solution previously obtained by the VMEC code [Hirshman and Whitson, Phys. Fluids **26**, 3553 (1983)] for the same problem to provide an Eulerian background coordinate system and an initial guess of the equilibrium solution. In contrast to VMEC, SIESTA does not assume closed magnetic surfaces and, as a result, the final equilibrium solution can include magnetic islands and stochastic regions. Recently, the SIESTA code was successfully extended to address the solution of free-boundary problems specific to the geometry of the W7-X stellarator [Peraza-Rodriguez, Reynolds-Barredo, Sanchez, Tribaldos and Gieger, Phys. Plasmas **24** 082516 (2017)]. The way vacuum field and coil information was fed to SIESTA was however adapted to specific formats/software from that device. In this contribution we describe current efforts to facilitate the input of this information via the more general and widely used MAKEGRID code in order to extend the applicability of free-boundary SIESTA to arbitrary magnetic configurations.

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