

MHD Modeling.

Needs:

- codes able to analyze complicated 3D and 3D structures (and so current flow paths) gross scales

Methods

- ~~Codes~~ able to analyze phenomena resulting from complicated B fields, transients and spatial dependence.
small scales

? Turbulence

Development Paths:

- modify existing hydrodynamic free surface codes to deal with MHD forces and equations {UCLA, Boeing, LANL}
- modify existing plasma MHD codes to include free surface tracking and boundary layers. {PPPL, UT}
- Pay commercial companies {Flux 3D} to develop capability through SBIR grant