NSTX 5 Year Plan Kickoff Meeting Notes
12/22/06

-MHD: (SAS)
- Good suggestions to follow up:
0) Ideas that I have on the talk slides – many possible routes to take.
1) NTM – need to state a full plan of what we want to do, from characterization to a decision point of either mitigation, or possible active control. (i) what can be done, and (ii) what can be funded? EBW might simply not work for stabilization, due to problems with current drive localization and changes to what localization you might actually get. There's actually a lot of work in this area. Do we believe this is important enough to pursue? If so, we need to decide what level, and what are the decision points.
2) application of some amount of external transform – for MHD, ELM, and even general transport and divertor transport studies
3) Possible addition of more external RWM coils – for greater poloidal spectrum of applied field, external transform, test effect of penetration of passive plates and how active stabilization can be improved with optimal control algorithms using such coils (with ITER, KSTAR and CTF application).
4) Improved error field correction using this greater coil set – again, to support steady-state operation, but also influences boundary, ELM, NTM, RWM physics.
5) Calculate possible optimized plate jumper configuration, and wiring the passive plates to test these configurations.
6) Boundary group also suggests possible changes to secondary PP geometry, edge error field control (locked modes and low density are an issue).