Agenda for Transport Discussions
NSTX Research Forum
Thurs 9/12/02, 8:30-12:30 AM, B318

8:30 Dan Stutman   Transport scaling experiments
9:00 Stan Kaye   Counter-Injection Experiments
                         Aspect ratio scaling experiment
9:30 Rajesh Maingi   MAST and DIII-D comparisons
                         NBI density limits and H-modes
10:00   Charles Bush   H-mode experiments
10:30   Park/Munsat   ETG and ITG studies
11:00   Stewart Zweben   Edge turbulence control
11:15   Ricky Maqueda   GPI experiments
11:30   Boedo, Synakowski, Ji, Vlad, Fredrickson
12:15   Discussion of Priorities
12:30 Lunch

Transport and Turbulence ET Discussion Summary
S. Zweben for the NSTX T&T Group
9/13/02

Total number of run days allocated: 13
Total number requested: 22-23
Total number of higher priority (blue): 16-17

- ST characterization – global
  - *Transport scaling with configuration and shape*   *2*
    - *H-mode condition vs non-H-mode condition*
  - *A-scaling in NSTX (ohmic/NBI)*   *1-2*
  - *NSTX/MAST similarity*   *1*
  - NSTX/DIII-D similarity: dimensional and dimensionless   1

- Local transport (electrons/ions/impurities)
  - Info from Transport scaling XPs
  - A-scaling in NSTX (C pellets/impurity puffing)   1
  - *Dimensionless transport (beta, rho-star)*   2
    - *ETG characterization (late in run)*
    - ***beta scaling is a main research goal of campaign***
  - Core fluctuation characterization (reflectometry in L-mode core)
  - Ti-Te anomaly – additional XPs????   1
  - Electron heat pulse studies   1

- Rotation effects
  - *HHFW driven Hmodes (comparison to NBI Hmodes)*   *1*
  - *Counter-injection campaign*   *5*

- Edge transport
  - Edge turbulence characterization – transition, ELMs, intermittency   1
  - Edge turbulence control techniques

- Cross-cutting
  - ELM characterization (overlap with MHD, edge turbulence characterization of Hmodes)   1
  - *H-mode fueling – end of run when better control over HFS puff*   *1*
  - NBI density limits   1
  - *Extension of Ptrh scaling (density, Ip, Bt) 1*

- Fast ion confinement
  - how do losses scale with beam energy, plasma-wall gap, q0, Ip, etc.   1
  - NPA spatial scans in non-H and H – mostly piggybacking