

Suggested priority and run time allocation by category

CATEGORY	Priority I	Priority II
FY2010 JRT on SOL heat transport	3	0
Divertor and SOL transport, turbulence, sources, flows, and	2	0.5
Dust studies	0	0
Pedestal and ELMs, including ELM control with RMPs	3	1.5
Total run time:	8	2

NSTX Boundary Physics TSG proposals

- **FY2010 JRT on SOL heat transport**

3 days

- 21. R. Maingi, Measurements of heat flux profiles for the FY2010 Joint Research Milestone, 5 days
- 22. R. Maqueda, GPI based research in support of the 2010 edge JRT milestone, 0.5 day

- **Divertor and SOL transport, turbulence, sources, flows, and heat flux mitigation**

0.5 + 0.5

- 23. V. A. Soukhanovskii, Divertor heat flux reduction and detachment studies with impurity seeding and LLD pumping for NSTX-U, 1 day

1 day

- 24. V. A. Soukhanovskii, Snowflake divertor characterization in NSTX, 1 day
- 25. A. McLean, Simple As Possible Plasmas (SAPP) on NSTX, 1 day
- 26. A. McLean, Regular Spectroscopic Characterization of the LLD, 0.5 day
- 27. A. McLean, Spectroscopic characterization of molecular sources in NSTX, 1 day

0.5 day

- 28. S. Zweben, Test of LLD Electrodes for SOL Control, 0.5 day
- 29. N. Nishino, Two dimensional ion flow measurement, 0 days
- 30. M. A. Jaworski, Turbulence and divertor target plasma characterization during transition to sheath-limited regime, 0 days
- 31. A. Pigarov, Study of secondary electron emission and thermoelectric current effects with Li, 0.5 day

- **Dust studies**

- 32. C. H. Skinner, Dust Mobilization studies with PMI probe, 0.25 day+piggyback
- 33. R. D. Smirnov, Modeling of dust trajectories and radiation mantle, 0 days

NSTX Boundary Physics TSG proposals

- **Pedestal and ELMs, including ELM control with RMPs**

1. X. Q. Xu, Controlling the onset of Type-I Elms by rigid-body toroidal rotation via ExB flow shear, 0 day
2. G. McKee, H-mode Pedestal Fluctuation Dynamics in ELM'ing and ELM-free scenarios, 1 day

0.5 day

3. **J.-W. Ahn, Effect of externally applied 3-D fields on divertor profiles, 1 day**

4. J.-W. Ahn, Characterization of ELM heat flux profiles, 1 day
5. J. Canik, Probing the role of homoclinic tangles in the ELM process, 1 day

0.5 day
ITER

6. **J. Canik, Density pumpout due to RMPs as a function of collisionality, 0.5 day**

7. **A. Loarte, Effects of ELM control with resonant magnetic perturbation on edge power fluxes between and at ELMs, 2 days**

ITER
1 day
ITER

8. **A. Loarte, Physics processes leading to ELM triggering by vertical jogs and extrapolation to ITER, 1.5 day**

9. **A. Sontag, ELM stability dependence on triangularity, 1-2 days**

10. **D. Battaglia, ELM suppression using 3D fields from a single row off-midplane coils on NSTX, 1 day**

11. D. Battaglia, Imaging the edge island structure in NSTX during the application of 3D fields, 0.5 day or piggyback

1 day

12. **A. Diallo, Increasing the Range of Achievable Pedestal Height, 1.5 days**

13. A. Diallo, Correlation of Fluctuations measurements inside the separatrix and GPI, 0.25 day

0.5 day

14. **J.-K. Park, RMP threshold of ELM modification at different q95, 0.5-1 day**

15. R. Goldston, Use of ICRF to Trigger ELMs, 1 day

16. R. Goldston, Use SPAs to Drive EHOs, 1 day

0.5 day

17. **R. Goldston, When Does Core Radiation Affect Confinement, 1 day**

18. R. Goldston, Drive Edge Harmonic Oscillations with Modulated Radio Frequency Heating, 0.5 day

0.5 day

19. **R. Maingi, Dependence of edge profile modification by lithium to proximity to LLD , 1 day**