



Proposal and Attendance Form for NSTX Research Forum 2001

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Please write in the boxes below a one-page abstract of your proposal to be presented:

<p>Title: Dynamically Evaluations of Boundary Plasma</p> <p>Abstract: Is the boundary plasma in a equilibrium state or in a dynamic steady state? The latest development of BOUT is to address the questions. By specifying the temperature and density of boundary plasma at the inner radial boundary surface, (i.e., $\psi=0.9$), and sinks in the far SOL and in the divertor plates, BOUT is able to evolve plasma profiles into a steady state with self-consistent turbulent transport. It has been found that electron temperature is most governed by parallel thermal transport in the SOL. However, the density and ion temperature are radially transported to the far SOL by boundary turbulence. On the top of the poloidal sheared flow, it has been observed a mode which has fairly large density fluctuations which show up as a wave moving radially in and out. The boundary plasma profiles appear to be something like a hyperbolic tangent with a radial wave structure superimposed.</p>

<p>Choose only one topical session by inserting X for each proposal (Use separate forms for separate proposals)</p>	<p>2000 Results (mbell@pppl.gov) & 2001 Research Program (esynakowski@pppl.gov) (Please submit by January 10, 2001)</p> <p> <input type="checkbox"/> ET1: Macroscopic Stability <input type="checkbox"/> ET2: Transport & Turbulence <input type="checkbox"/> ET3: High Harmonic Fast Wave & Electron Bernstein Wave <input type="checkbox"/> ET4: Coaxial Helicity Injection <input type="checkbox"/> ET5: Boundary Physics </p> <p>2002-2005 Research Opportunities (mpeng@pppl.gov) (Please submit by January 11, 2001)</p> <p> <input type="checkbox"/> TG1: Noninductive Startup <input type="checkbox"/> TG2: Heating, Current Drive & Fueling <input type="checkbox"/> TG3: Macroscopic Stability <input type="checkbox"/> TG4: Transport & Turbulence <input type="checkbox"/> TG5: Energetic Particle Physics <input type="checkbox"/> TG6: Multiphase Interface (Boundary Physics) </p> <p>Fluctuations Measurement (esynakowski@pppl.gov) (Please submit by January 10, 2001)</p> <p><input type="checkbox"/> Fluctuations Measurement proposals</p>
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Select a presentation option by inserting X:

- Oral presentation in person
- Remote presentation via ShowStation and speakerphone
- Ask discussion leader to include in discussion
- No need to present, but include in meeting summaries
- Attend Forum only (in person or with remote access)

Special Requests for your proposal (projector type, time constraints, etc.):

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Please return this document via e-mail attachment to jrobinson@pppl.gov, jsavino@pppl.gov, and the corresponding organizer listed above. Please e-mail questions or comments to the organizers listed above.