

ANNOUNCEMENT AND CALL FOR ABSTRACT

October 10, 2002

JOINT SPHERICAL TORUS WORKSHOP AND US-JAPAN EXCHANGE MEETINGS (STW 2002):

- * Eighth International Spherical Torus Workshop
- * U.S.-Japan Exchange Meeting on Stability and Confinement in Spherical Tori
- * U.S.-Japan Exchange Meeting on Theory and Simulation Study for Spherical Tokamaks

18 – 21 November 2002

Princeton Plasma Physics Laboratory (PPPL)

Princeton, New Jersey, U.S.A.

INTRODUCTION AND CALL FOR ABSTRACT

Increased research results from toroidal experiments of very small aspect ratio plasmas have emerged in the past few years. The progress in Spherical Torus (ST) and Compact Toroid (CT) studies has led to a growing interest in the fusion community, and indicates the timeliness of the upcoming STW 2002. This workshop, immediately to follow the 44th Annual Meeting of the Division of Plasma Physics of the American Physical Society, will combine several meetings and take advantage of the resultant broad participation for maximum benefit to the participants and their research activities. We invite your participation.

STW 2002 combines the 8th International Spherical Torus Workshop, the U.S.-Japan Exchange Meeting on the Spherical Torus, and the U.S.-Japan Exchange Meeting on Numerical Simulation of Spherical Torus Stability. It will be held on November 18-21 (Monday – Thursday noon), and be hosted by PPPL. A streamlined process of registration and abstract submission, presentation submission, and presentation access is adopted for this joint meeting.

Prospective participants should email the following to Mike Bell, John

Robinson, Joanne Savino, and Martin Peng (mbell@pppl.gov, jrobinson@pppl.gov, jsavino@pppl.gov, mpeng@pppl.gov, respectively), with “STW2002” in the subject line:

- 1) Name, institution, address, email address, and telephone number by October 25, 2002
- 2) One-page abstract containing subject area (see below), title, authors, institutions in MS Word or Acrobat pdf format, by October 25, 2002,
- 3) Presentation (oral or poster) file in MS Word, MS PowerPoint, or Acrobat pdf format, by November 11, 2002.

Remote participation in STW 2002 will be possible.

All above information will be made available at the “STW2002” link at http://nstx.pppl.gov/Menu_folder/meetings.html

This site contains links to information on STW 2002 local arrangements including remote participation, and to hotels, transportation, and maps of the vicinity of Princeton, New Jersey. Additional data will be needed from participants from outside of the U.S. Joanne Savino (jsavino@pppl.gov), as head of the local organizing committee, will issue helpful details and provide assistance. Please check the web page for up-to-date information.

OBJECTIVES AND TOPICAL AREAS

The objectives of the STW are to provide a forum for in-depth discussion of recent progress in research, facilities, projections, plans, and collaboration opportunities. The workshop thereby contributes to advancing the understanding of ST and CT plasmas and device designs, and thereby enhancing their contributions to plasma science and fusion energy applications. The scope of the workshop covers the full range of research activities on ST extended to its interface with the CT fusion concepts, such as the Spheromak and Field Reversed Configurations.

Topical areas of interest include:

A. Recent research progress in

- A1. Solenoid-free initiation and ramp-up of plasma current

- A2. Macroscopic equilibrium and stability
- A3. Transport and turbulence (ETG, ITG, edge pedestal, etc.)
- A4. Wave-energetic particle-plasma interactions (heating & current drive, etc.)
- A5. Boundary physics (SOL, particle & impurity control, etc.)
- A6. Operation scenarios for sustained high performance plasmas
- B. Theoretical and computer modeling in these topics (B1 – B6)
- C. Plasma diagnostics of special interest
- D. Technology developments of special interest (plasma control, etc.)
- E. Upcoming research plans
- F. Concepts and issues for future experiments

Please indicate on the abstract the topical area(s) of most relevance to your abstract.

WORKSHOP AGENDA

The workshop agenda will be developed according to the following session plan:

- Monday:
 - I) Solenoid-free initiation and ramp-up
 - II) Transport and turbulence
 - III) Wave-energetic particle-plasma interactions
 - IV) Boundary physics
- Tuesday:
 - V) Operation scenarios and integration
 - VI) Diagnostics development
 - VII) Technology development
 - VIII) Posters
 - * Workshop dinner (no host)
- Wednesday:
 - IX) Near term research plans
 - X) Concepts for future experiments
 - XI) Macroscopic equilibrium and stability
 - * Session leaders' dinner
- Thursday:
 - XII) Summaries by session leaders, recommendations

Whereas Session VIII will be dedicated to the posters, the posters can be put up through the duration of the joint meeting. The MHD session is placed in Wednesday afternoon to minimize overlap with an MHD mode control workshop to be held at Columbia University, N.Y., for November 18 – 20, 2002. The details of the agenda will be determined and made available on the above web link by November 8, 2002. All the presentations, including the session summaries, will be made available through the same web link to enable efficient presentations and remote participation at the joint meeting.

LOCAL INFORMATION

Information on transportation and accommodation for the Princeton Plasma Physics Laboratory (PPPL) and the Princeton area can be found at:

http://nstx.pppl.gov/Pages_folder/meetings_folder/STW_2002/index.html

A number of rooms at the rate for the U.S. government business travel will be made available at the Holiday Inn Princeton (previous the Novotel) for the benefit of the participants of this workshop ('STW 2002'). These rooms will be released on October 31, 2002.

PROGRAM COMMITTEE

The STCW 2002 Program Committee members are:

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The members of the Program Committee are ready to provide advice to prospective participants from respective countries on the subject and content of abstract and presentations.