



13th International Workshop on Plasma Edge Theory in Fusion Devices



19-21 September, 2011
Embassy Suites Hotel
South Lake Tahoe,
California USA

First Announcement and Call for Papers

SUBJECT MATTER

The 13th International Workshop on Plasma Edge Theory in Fusion Devices is organized by Lawrence Livermore National Laboratory (LLNL). Like the twelve preceding workshops, this workshop addresses plasma theory of the edge region in magnetic confinement fusion devices. It will reflect the present status of the theory for the boundary layer of fusion plasmas. The emphasis will be on the development of theory and of appropriate numerical methods, with a secondary interest in self-consistent modeling of experimental data (including also empirical elements).

The following topics are intended to be covered by invited and contributed lectures:

Basic edge plasma theory

- Magnetic boundary structure including magnetic stochasticity
- Sheath effects
- Edge transport parallel and perpendicular to magnetic field
- Electric field effects
- Instabilities and turbulence
- Neutrals and multi-ion theories, radiation
- Plasma detachment including cold and dense buffer plasmas
- New edge-relevant numerical and computational methods

Models of special phenomena and edge control

- Hot spots, radiative cooling
- L-H transition, blobs, ELMs (including control), and pedestal structure
- Flow patterns, momentum transport, and impurity retention
- Biasing and shaping of targets
- Dusty effects

Integrated edge plasma modelling

- Kinetic and Monte Carlo codes
- Multi-fluid codes
- Effects of plasma edge/core coupling
- Validation of edge plasma theories

The workshop will consist of invited lectures, oral presentations and poster contributions. Contributed papers will be mainly presented as posters. It is recommended that orally presented papers are also accompanied by a poster.

PARTICIPATION AND LANGUAGE

The number of attendees of the workshop will be limited to 80. The workshop language is English.

CALL FOR PAPERS

Contributions to any of the given topics are welcome. Authors are invited to submit one-page abstracts typed on letter or A4 size paper, describing the most important aspects of the work to be reported. The instructions and templates will be available on the workshop web page. The abstract should be submitted by e-mail to pet-13@llnl.gov as a Portable Document Format (PDF) file. A confirmation of receipt e-mail will be sent within three working days. Submissions printed on paper should be made only if severe problems arise with electronic submission. The camera-ready abstracts must be received no later than 2 May 2011. The Scientific Committee will select the papers on the basis of the submitted abstracts. Authors will be notified about the acceptance of their contribution by 10 June 2011.

SUPPORT

Partial support (airfare and/or lodging) will be provided for a small number of non-U.S. participants based on need and quality of proposed presentation. Interested individuals should submit a request indicating their need along with their abstract.

VISAS

It is recommended that participants requiring U.S. visas submit their visa applications at least 6 months in advance. Participants requiring an invitation letter for their visa should request it by an email sent to pet-13@llnl.gov.

PROCEEDINGS

The invited and accepted contributed papers will be included in the proceedings of the workshop and published in the journal "Contributions to Plasma Physics". All papers will be refereed during the workshop, so it is essential that authors adhere to the deadline for receipt of manuscripts. The maximum length is limited to 10 pages for invited papers, and to 5 pages for contributed papers. Detailed instructions for the preparation of the manuscripts and posters will be mailed together with the acceptance letter.

ACCOMMODATION AND DIRECTIONS

Participants will be accommodated at the Conference Hotel (Embassy Suites), where special conference rates have been established. Detailed accommodation and transit information will be given at the workshop web page.

SATELLITE MEETING

There will be a satellite workshop on the BOUT++ edge turbulence code Sept 12-16 at LLNL. For information contact X. Xu, xu2@llnl.gov.

INTERNATIONAL SCIENTIFIC COMMITTEE

J.A. Heikkinen (Chair)	VTT, Espoo, Finland
P.J. Catto	MIT/PSFC, Cambridge, USA
R.H. Cohen	LLNL, Livermore, USA
D.F. Duchs	MPG-IPP, Garching, Germany
Y.L. Igitkhanov	Forschungszentrum Karlsruhe, IHM, Germany
D.Kh. Morozov	RRC Kurchatov Institute, Moscow, Russia
T. Takizuka	JAEA, Naka, Japan
Y. Tomita	NIFS, Toki, Japan

IMPORTANT DATES

· 10 March 2011	Second Announcement
· 2 May 2011	Deadline for submission of abstracts
· 10 June 2011	Information to contributors
· 1 August 2011	Deadline for registration
· 19 September 2011	Deadline for manuscripts
· 19-21 September 2011	Workshop

LOCAL ORGANISING COMMITTEE

R.H. Cohen (Chairman)	Mailing address:
I. Massiatt (admin contact)	R. H. Cohen or Irene Massiatt,
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