



11th International Workshop on **Plasma Edge Theory in Fusion Devices**



23-25 May 2007
Hida Center,
Takayama, Gifu,
Japan

11th PET

Second Announcement and Call for Papers

SUBJECT MATTER

The 11th International Workshop on Plasma Edge Theory in Fusion Devices is organised by National Institute for Fusion Science, Japan. Like the ten 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 modelling 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, MARFES and ELMs
- Flow patterns and impurity retention
- Biasing and shaping of targets
- Dusty plasma layers

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.

The current list of confirmed invited speakers is as follows:

- R. Cohen, Lawrence Livermore National Laboratory: *“Edge gyrokinetic code development”*
- M. Kotschenreuther, University of Texas: *“Advanced divertor concepts”*
- D. Morozov, Kurchatov Institute: *“Reduced description of impurity seeded edge plasmas”*
- N. Ohya, National Institute for Fusion Science: *“Internal diffusion barrier in the local island divertor discharge”*
- D. Ryutov, Lawrence Livermore National Laboratory: *“Geometrical effects in plasma stability and dynamics of coherent structures in the divertor”*
- M. Yagi, Kyushu University: *“Disparate scale nonlinear interactions in edge turbulence”*

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 A4 size paper, describing the most important aspects of the work to be reported. The instruction and templates are available on the workshop web page, <http://www.tcsc.nifs.ac.jp/pet11/> . Color pictures are accepted for the electronic abstract collection, but the Book of Abstracts will be printed in black and white. Please ensure the legibility of your pictures without color.

The abstract should be submitted by e-mail to pet11@tcsc.nifs.ac.jp as a Portable Document Format (PDF) file. Please indicate whether you wish to make an oral presentation. 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 19 January 2007. 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 21 February 2007.

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 12 pages for invited papers, and to 6 pages for contributed papers. Detailed instructions for the preparation of the manuscripts and posters will be mailed together with the acceptance letter.

SOCIAL PROGRAM

A banquet will take place on 24 May 2007 (Thursday), evening in the restaurant "Art & Festa Forest in TAKAYAMA" (<http://www.takayamaland.co.jp/english/index.html>) near the conference site.

REGISTRATION AND ACCOMMODATION

The registration and hotel reservation form will be found on the conference web site soon. The registration fee is 25,000 Japanese yen including the costs of refreshments, daily lunches, banquet, the Book of Abstracts and the Proceedings. The registration fee should be paid to the registration desk at the conference site by cash. Only Japanese yen is acceptable. The HIDA-TAKAYAMA Washington Hotel Plaza is reserved as the conference hotel for the participants, which is located just in front of the JR Takayama Station. Please do not book directly, but use registration form instead. Transportation between the hotel and the conference site is provided.

INTERNATIONAL SCIENTIFIC COMMITTEE

J.A.Heikkinen (Chair)	VTT, Espoo, Finland
H.Capes	CEA, Cadarache, France
P.J.Catto	MIT/PSFC, Cambridge, USA
R.H.Cohen	LLNL, Livermore, USA
D.F.Düchs	MPG-IPP, Garching, Germany
Y.L.Igitkhanov	MPG-IPP, Greifswald, Germany
D.Kh.Morozov	Kurchatov Inst., Moscow, Russia
T.Takizuka	JAEA, Naka, Japan
Y.Tomita	NIFS, Toki, Japan

IMPORTANT DATES

28 October 2006	Second announcement
19 January 2007	Deadline for submission of abstracts
21 February 2007	Information to contributors
16 March 2007	Deadline for registration and hotel reservation
23 May 2007	Deadline for manuscripts
23-25 May 2007	Workshop

LOCAL ORGANISING COMMITTEE

N. Noda (Chairperson)
T. Takizuka (Co-Chairperson)
Y. Tomita (Scientific Secretary)
N. Ohno
T. Morisaki
S. Masuzaki
M. Kobayashi
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WORKSHOP WEB PAGE

<http://www.tcsc.nifs.ac.jp/pet11/>

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