



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



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

# 11<sup>th</sup> PET

**First 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.

## **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 will be available on the workshop web page, <http://www.tcsc.nifs.ac.jp/pet11/>

The abstract should be submitted by e-mail to [pet11@tcsc.nifs.ac.jp](mailto:pet11@tcsc.nifs.ac.jp) 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 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.

## **ACCOMMODATION AND DIRECTIONS**

Participants will be accommodated in hotels close to the conference site. Full details will be given in the Second Announcement. Detailed information on getting to the Hida Center will be given on the workshop web page.

## **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
T. Takizuka	JAEA, Naka, Japan

## **IMPORTANT DATES**

13 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  
R. Kanno  
A. Takayama

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## **WORKSHOP WEB PAGE**

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

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