#### SECOND ANNOUNCEMENT AND CALL FOR PAPERS

# 18th International Toki Conference (ITC18) Development of Physics and Technology of Stellarators/Heliotrons en route to DEMO

December 9 - 12, 2008 Ceratopia Toki, Toki-City, Gifu, Japan

## **INTRODUCTION**

The ITC-18 will be held in Toki, Japan, by the National Institute for Fusion Science (NIFS). Since its establishment in 1989, the NIFS has organized the ITC as an annual meeting for fusion related sciences.

Recent developments in experimental, theoretical and technical research show the clear route to the realization of a stellarator/heliotron type demo fusion reactor. ITC18 will be devoted to review the recent developments and to discuss the next steps forward to the demo reactor realization of stellarator/heliotron type. Topics related to any type of demo reactor other than stellarator/ heliotron are also welcome. Basic plasma research related to this issue is also within the scope of the conference.

The working language is English. The conference program format will consist of plenary sessions, invited talks and oral & poster presentations. Papers accepted after the standard review processes will be published in a scientific journal.

#### LIST OF TOPICS

The following topics will be discussed from physical and technological points of view:

- 1. Recent Experimental Projects
- 2. Confinement Physics
  - 2-1. Transport and confinement improvement
  - 2-2. MHD equilibrium and stability
  - 2-3. Turbulence and transport
  - 2-4. Divertor physics/technology
  - 2-5. Impurity control/transport
  - 2-6. Plasma wall interaction
  - 2-7. Energetic particle physics
- 3. New Concepts/DEMO
  - 3-1. Configuration optimization/New devices
  - 3-2. DEMO/Reactor studies of all fusion concepts
- 4. Steady State Operation
  - 4-1. Steady state operation
  - 4-2. Steady state technology
- 5. Heating and Fueling
  - 5-1. Heating physics/technology
  - 5-2. Fueling physics/technology
- 6. Fusion Technology
  - 6-1. Plasma facing components
  - 6-2. Blanket system
  - 6-3. Magnet system
  - 6-4. Utilities and other technologies

# 7. Diagnostics

- 7-1. Advanced diagnostics
- 7-2. New concept
- 7-3. Diagnostics for ITER/DEMO
- 8. Basic Plasmas and Related Physics

# **PLACE**

Ceratopia Toki Conference Hall Toki-City 509-5121, Gifu-ken, JAPAN.

#### **CONFERENCE DATE**

December 9(Tue.) - 12(Fri.), 2008.

### **LANGUAGE**

English is the official language of the conference.

# **ABSTRACT SUBMISSION**

Authors are requested to submit one-page abstracts on-line (abstract submission page on <a href="http://itc18.nifs.ac.jp/">http://itc18.nifs.ac.jp/</a>) by September 5, 2008. Papers should contain original and previously unpublished work on the conference topics. Abstracts should be sufficiently detailed in describing the aim of the work and the obtained results. The Program Committee will select the papers on the basis of the submitted abstracts. Authors will be notified on acceptance of abstracts and assignment of their papers into sessions by September 30, 2008. The accepted abstracts will be bound as a booklet and distributed to participants at the Conference. They will be posted on the Conference web-site as well.

## **CONFERENCE PROCEEDINGS**

All manuscripts of the proceedings will be accepted before the first day of the conference. Maximum length of the manuscript should be 6 pages for plenary and invited talks and 4 pages for contributed papers. Proceedings will be published as a CD-ROM and distributed to all participants.

#### **EXTENDED PAPER SUBMISSION**

Program committee encourage to submit paper as an extended version of the manuscript for the proceedings to

"Plasma and Fusion Research" (http://www.jspf.or.jp/PFR/).

Expected dead line of the submission would be one month after the conference. The submitted manuscripts are treated as regular articles for the special issue of ITC-18 under the special editorial board organized during the conference. Submission fee for this special issue will not be included in the registration fee.

#### **REGISTRATION FEE**

The registration fee is 15,000 yen per participant, which includes admission to all sessions, conference materials, a book of abstract and proceeding CD, coffee breaks and the banquet. Additional banquet ticket for an accompanied person is 5,000 yen. The fee for students is 10,000 yen.

All attendees are requested to register through our web-site. Credit card payment is the only method we are accepting.

#### **VISAS**

In case you need a visa to enter Japan, the conference secretaries will provide an official letter to obtain the entry visa.

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- Y. Yoshimura, M. Yoshinuma

## **IMPORTANT DATES**

2nd announcement: August 1, 2008

Deadline for abstract submission: September 5, 2008 (extended)

Notification of abstract acceptance:

Deadline for registration and hotel reservation:

Deadline for proceeding submission:

Conference:

September 30, 2008

October 31, 2008

December 9, 2008

December 9 - 12, 2008

Deadline for extended paper submission: January 9, 2009

## **OFFICIAL WEB-SITE AND CONTACT ADDRESS**

The conference web-site and the contact address are as follows:

Web-site: <a href="http://itc18.nifs.ac.jp/">http://itc18.nifs.ac.jp/</a> E-mail address: itc18@nifs.ac.jp