

ITC19

## **SECOND ANNOUNCEMENT AND CALL FOR PAPER**

# **19th International Toki Conference (ITC19) on Advanced Physics in Plasma and Fusion Research**

December 8 - 11, 2009

Ceratopia Toki, Toki-City, Gifu, Japan

### **SCOPE**

The 19th international Toki conference (ITC19), hosted by National Institute for Fusion Science, brings together scientists working in basic plasmas and frontiers of nuclear fusion. The conference discusses the recent progress and achievement in a wide range of plasma physics studies originating from universities to mission-oriented institutes. The central scope of the conference is to obtain a deeper understanding of the fundamental plasma processes underlying such a large variety of the phenomena associated with plasmas, and ultimately to extract universal or elemental physical laws from them. The systematization of such scientific activities and achievements should contribute to finding the directions in the new era of nuclear fusion facing the realization of a burning plasma in ITER and other innovative technologies.

### **LIST OF TOPICS**

#### **1. Transport and Confinement**

Non-diffusive & non-local transport; Structure formation;  
Improved confinement; Multi-scale interaction; Numerical reactor

#### **2. Turbulence and Flow**

Shear flow; Zonal flow; Vortex; Non-neutral plasma; Drift wave

#### **3. MHD Phenomena**

Stability; Reconnection; Magnetic island; High-beta plasma

#### **4. Wave-Particle interaction**

Energetic particle; Alfvén wave; Particle Acceleration; Shocks

#### **5. High-energy density plasma**

Inertial fusion; Warm dense matter; Strongly coupled plasma; Complex plasma

#### **6. Edge Plasma and Steady-State Physics**

Atomic process; Blob; Plasma-wall interaction; Dust; ELM; Fueling

#### **7. Heating and Diagnostics**

ECH; NBI; ICH; Spectroscopy; Laser & beam Diagnostics; Imaging;

#### **8. Advanced Plasma Science**

Gas-liquid interface plasma; Nano/Bio applications; EUV source; Ion trap

### **PLACE**

Ceratopia Toki, Takayama 4, Tokitsu-cho, Toki, JAPAN, 509-5121

### **CONFERENCE DATE**

December 8(Tue.) - 11(Fri.), 2009.

### **LANGUAGE**

English is the official language of the conference.

### **REGISTRATION**

All registrations can be made starting August 1 through the Conference web-site. (<http://peras.nifs.ac.jp/itc19/center>).

### **ABSTRACT SUBMISSION**

Authors are requested to submit one-page abstracts (A4 format) on-line by August 31, 2009 through the conference web-site (<http://peras.nifs.ac.jp/itc19/center>). The format of one-page abstract is available on the web-site. Submitted papers should be an original work associated with the conference topics, which has not been previously published. 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 the sessions by September 30, 2009. A booklet of the abstracts will be distributed to participants at the Conference. The abstracts will be available on the Conference web-site as well.

### **CONFERENCE PROCEEDINGS and PAPER SUBMISSION**

All manuscripts of the proceedings can be submitted through the web-site of ITC19 before the first day of the conference. The proceedings will be automatically submitted to Plasma Fusion Research (PFR), which is an electronic journal published by the Japan Society of Plasma Science and Nuclear Fusion (<http://www.jspf.or.jp/PFR/>). The maximum length of the manuscript should be 8 pages for plenary, 6 pages for invited talks, and 4 pages for contributed papers in the PRF format. The books of the accepted proceedings will be distributed to all participants after all peer review processes are completed. Submission fee for this special issue will not be included in the registration fee.

### **REGISTRATION FEE**

The registration fee is 20,000 yen. Additional banquet ticket for an accompanied person is 5,000 yen. The fee for students is 15,000 yen, also including the banquet 5,000 yen. All attendees are requested to register through the conference web-site before 31<sup>st</sup> October 2009. On-line payment is recommended with credit card on the conference web-site.

### **VISAS**

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

### **EXCURSION**

Two excursion plans are available in the afternoon on 10<sup>th</sup> December (Thu). One is NIFS tour, which bring you to see the major NIFS facilities, e.g., Large Helical Device, and virtual reality system (Complexcope and Design Aid Tool for Fusion Reactor). The other is a bus tour to the Tokugawa art museum and Tokugawa-en in Nagoya city. Tokugawa is the family name of 'Shogun', who governed Japan in the edo era (1603-1867). The Tokugawa art museum (<http://www.tokugawa-art-museum.jp/>) exhibits the treasures of a branch family who ruled Nagoya area. The Tokugawa-en (<http://www.tokugawaen.city.nagoya.jp>) is a Japanese garden they made

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### **IMPORTANT DATES**

On-line registration:	August 1, 2009
Deadline for abstract submission:	August 31, 2009
Notification of abstract acceptance:	September 30, 2009
Deadline for pre-registration and hotel reservation:	October 31, 2009
Deadline for paper submission:	December 8, 2009
Conference:	December 8 - 11, 2009