

## FIRST 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

This conference hosted by National Institute for Fusion Science brings together scientists working in basic plasmas and frontiers of nuclear fusion, covering physics studies originating from universities to mission-oriented institutes. The purpose is to discuss the recent progress and achievement in a wide range of plasma physics in order to obtain a deeper understanding of the fundamental plasma processes associated with nuclear fusion, and to find new directions towards further development in the new era of nuclear fusion facing the realization of a burning plasma in ITER.

### 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 working 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 on-line by August 31, 2009. Papers should contain original and previously unpublished work on the conference topics.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, 2009. 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.

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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 9, 2009
Conference:	December 8 - 11, 2009