

Program

September 8, Sunday

Registration (18:30 ~ 21:00 Atrium)

Get-Together Party (18:30 ~ 21:00 Foyer)

September 9, Monday

Registration (8:30 ~ 10:00 Atrium)

Opening Address (Century Hall)

Plenary Session (10:20 ~ 11:50 Century Hall: Chairpersons A. Sitenko/N. Sato)

9Z1 B. Coppi

Reconnecting (Fusion Research) to space and astrophysics

9Z2 H. Matsumoto

Space plasma micro-dynamics

Poster Session I (13:30 ~ 15:10 Shirotori Hall: Chairperson S. Okamura)

Invited Talks (15:30 ~ 17:00)

(Recp. Hall: Chairpersons M.G. Haines/
A. Fukuyama)

9X1 S. Zweben

Alpha particle physics in the
Tokamak Fusion Test Reactor
TFTR DT experiment

9X2 D. Campbell

H-mode confinement and fusion
performance in JET

9X3 W.P. West

Divertor plasma studies on DIII-D:
experiment and modeling

(Rm. 141: Chairpersons M. Hellberg/
H. Obayashi)

9Y1 D. Melrose

Some properties of magnetized pair
plasmas

9Y2 B. Tsurutani

Nonlinear electromagnetic waves
and spherical arc-polarized waves
(Alfvén shocks?) in space plasmas

9Y3 Z. Pu

Magnetic reconnection at the
magnetopause in the presence of a
velocity shear

September 10, Tuesday

Plenary Session (8:30 ~ 10:00 Century Hall: Chairpersons G.J. Morales/S. Takamura)

10Z1 T.M. O'Neil

Plasmas with a single sign of charge

10Z2 E.N. Parker

Spontaneous current sheets and stellar X-ray emission

Invited Talks (10:20 ~ 11:50)

(Recp. Hall: Chairpersons Z. Shang/
M. Katsurai)

10X1 A.K. Sen

Basic studies of fluctuations
transport and its control

10X2 K. Itoh

Turbulent transport and structural
transition in confined plasmas

10X3 A. Sen

Tokamak equilibrium and stability
with arbitrary flows

(Rm. 141: Chairpersons M. Tendler/
T. Idehara)

10Y1 Y. Amagishi

Split of the Alfvén wave packet in
a dissipative plasma

10Y2 W.N. Gekelman

Experimental observations of shear
Alfvén wave generated by narrow
current channels

10Y3 R. Hatakeyama

Potential formation due to ECR
under mirror configurations of
magnetic field

Poster Session II (13:30 ~ 15:10 Shirotori Hall: Chairperson R. Horiuchi)

Invited Talks (15:30 ~ 17:00)

(Recp. Hall: Chairpersons L. Steinhauer/
K.N. Sato)

10X4 H. Soltwisch

Observation of magnetic field
perturbations during sawtooth
activity in tokamak plasmas

10X5 T. Crowley

Temporal variation on the electric
potential in the TEXT-upgrade
tokamak

10X6 K.H. Finken

Studies on basic phenomena during
the pellet injection into high
temperature plasmas

(Rm. 141: Chairpersons P. Sunka/
T. Hayashi)

10Y4 D.D. Ryutov

Possible effects of the finite photon
mass in the magnetohydrodynamics
of a space plasma

10Y5 A. Kageyama

Dipole field generation by an
MHD dynamo

Banquet (18:30 ~ 21:00 Tokyu Hotel)

September 11, Wednesday

Plenary Session (8:30 ~ 10:00 Century Hall: Chairpersons P. Vandenplas/K. Mima)

11Z1 F. Wagner

Topics in toroidal confinement

11Z2 H.A. Baldis

Parametric instabilities in the context of ICF

Special Session (10:00 ~ 10:40 Century Hall)

11W1 M. Fujiwara

Progress in the LHD (Large Helical Device) program

Technical Tour to NIFS' Toki New Site

Invited Talks (11:00 ~ 12:00)

(Recp. Hall: Chairpersons A. El Nadi/
T. Kawabe)

11X1 J.M. Dawson

Generation of X-rays from comet
Hyakutake

11X2 C.K. Birdsall

Waves and oscillations near the
plasma edge

(Rm. 141: Chairpersons B. Dasgupta/
Y. Nishida)

11Y1 G. Matthieussent

Relativistic particle acceleration
using lasers and plasmas

11Y2 H. Nishimura

High convergence uniform
implosion of fusion pellets with
new GEKKO laser

September 12, Thursday

Plenary Session (8:30 ~ 10:00 Century Hall: Chairpersons D. Biskamp/Y. Kawai)

12Z1 K. Makishima

Magnetohydrodynamic interpretations of high-energy phenomena in galaxies and
clusters

12Z2 H. Hasegawa

Generalized spectrum, intrinsic irreversibility and pattern formation

Invited Talks (10:20 ~ 11:50)

(Recp. Hall: Chairpersons Won Namkung/
T. Yamanaka)

12X1 S.V. Bulanov

Magnetic interaction of ultrashort
high-intensity laser pulses in
plasmas

12X2 Y. Kato

Fast ignition and related plasma
physics issues with high intensity
lasers

(Rm. 141: Chairpersons Y.P. Huo/
R. Sugihara)

12Y1 G. Marklund

Overview of space plasma
phenomena observed by FREJA
double probe electric field
experiment

12Y2 T. Mukai

Kinetic properties of hot plasmas in
the earth's magnetotail: GEOTAIL
observation

12X3 W.L. Kruer

Deflection, spraying and induced
scattering of intense laser beams in
plasmas

12Y3 H.L. Pécseli

Electrostatic lower-hybrid wave
phenomena detected by
instrumented spacecrafts

Poster Session III (13:30 ~ 15:10 Shirotori Hall: Chairperson H. Naito)

Invited Talks (15:30 ~ 17:00)

(Recp. Hall: Chairpersons I. Golovin/
T. Cho)

12X4 Y. Kiwamoto

Behavior of a hot ion plasma in
the GAMMA10 tandem mirror

12X5 Y. Hirano

Self-organization and its effect on
confinement in a reversed field
pinch plasma

12X6 R.N. Sudan

Convective turbulence in weakly
ionized plasma

(Rm. 141: Chairpersons

M. Fukao)

12Y4 A. Tomimatsu

The dynamo effect in magneto-
hydrodynamic accretion onto a
rotating black hole

12Y5 F.F. Chen

Low-field helicon-ECR discharges

12Y6 R.L. Merlino

Experiments on waves and
instabilities in dusty plasmas

September 13, Friday

Plenary Session (8:30 ~ 10:00 Century Hall: Chairpersons P.H. Sakanaka/M. Fujiwara)

13Z1 J.B. Taylor

Turbulence in two-dimensional plasmas and fluids

13Z2 Y. Watanabe

Dust phenomena in processing plasmas

Invited Talks (10:20 ~ 11:50)

(Recp. Hall: Chairpersons R.L. Dewar/
M. Wakatani)

13X1 M. Ono

Plasma transport control and self-
sustaining fusion reactor

13X2 T. Ozeki

Physics issues of high bootstrap
current tokamak

13X3 D.I. Choi

Physics objectives and role of
advanced superconducting tokamak
"KSTAR" for the Korean National
Fusion Project

(Rm. 141: Chairpersons P.K. Shukla/
T. Shoji)

13Y1 H. Sugai

Diagnostics for advanced plasma
control of materials processing

13Y2 J.H. Keller

New and possible future trends in
inductively coupled plasmas, ICP,
for semiconductor processing

13Y3 A. Matsuda

Recent understandings of the
growth process of amorphous
silicon from a silane glow-discharge
plasma

Concluding Session (13:30 ~ 15:30 Century Hall: Chairperson T. Sato)

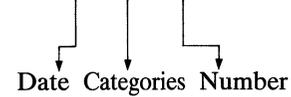
“Future directions of PLASMA SCIENCE”

13V1 P.K. Kaw, 13V2 M. Yamada, 13V3 G. Zaslavsky, 13V4 N. Sato

Closing

Code of papers

12 H 07



Categories

- A: Waves and Instabilities
- B: Transport Phenomena
- C: Particle Accelerations and Beam Production
- D: Magnetic Reconnection
- E: Plasma-Edge Phenomena
- F: Elementary Processes
- H: Nonlinear Phenomena
- I: Heating and Current Drive
- J: Radiation Sources and Processes
- K: Plasma Production and Confinement
- L: Plasma-Material Interaction
- M: Diagnostics
- P: Self-Organizing Plasmas
- Q: Laser Plasmas and Short-Pulse Phenomena
- R: Reactive Plasmas for Material Processing
- S: Dust and Fine-Particle Plasmas
- T: New Approaches
- U: Others

- V: Concluding Session
- W: Special Session
- X: Invited Talks (Rec. Hall)
- Y: Invited Talks (Rm. 141)
- Z: Plenary Session