

MONDAY MORNING

SEPTEMBER 27

7:30-9:00 REGISTRATION

9:00-9:15 Welcome and announcements

9:15-12:25 KEYNOTE LECTURES AND LHD OVERVIEW

9:15-10:15 Grieger keynote: "IPP Stellarators and the Wendelstein Line"

10:15-10:45 BREAK

10:45-11:45 Iiyoshi keynote: "Historical Review of Helical Systems Research in Japan"

11:45-12:25 Komori "Overview of Large Helical Device"

12:30 GROUP PHOTO

12:30-2:00 LUNCH (ON YOUR OWN)

MONDAY AFTERNOON

2:00-5:10 PROGRAM OVERVIEWS

2:00-2:40 Jaenicke "Overview on Recent W7-AS Results"

2:40-3:20 Matsuoka "Overview of CHS Experiments"

3:20-3:50 BREAK

3:50-4:30 Alejaldre "Overview of TJ-II Flexible Heliac Experiment"

4:30-4:55 Harris "Status of the H-1 Heliac Experiment"

4:55-5:20 Shats "Fluctuations and Turbulent Transport Studies in the H-1 Heliac"

TUESDAY MORNING

SEPTEMBER 28

8:30-10:30 PROGRAM OVERVIEWS

8:30-9:10 Anderson "HSX Final Alignment, Assembly, and Initial Operation"

9:10-9:50 Obiki "Goals and Status of Heliotron-J"

9:50-10:30 Wanner "Design Goals and Status of the Wendelstein 7-X Project"

10:30-11:00 BREAK

11:00-1:05 TRANSPORT AND ROTATION

11:00-11:25 Brackel "An Empirical Model of Electron Energy Transport in the Presence of Rational Surfaces in W7-AS"

11:25-11:50 Hidalgo "On the Role of Rational Surfaces on $E \times B$ Sheared Flows and Transport In Fusion Plasmas"

11:50-12:15 Nishimura "Recent Progress and Future Plan in the Study of Radial Electric Fields and Plasma Rotations in CHS"

12:15-12:40 Kovrizhnykh "Neoclassical Theory of Plasma Rotation in Non-symmetric Toroidal Magnetic Systems"

12:40-1:05 Beidler "The ECRH-Driven 'Electron Root' at W7-AS"

LUNCH (ON YOUR OWN)

TUESDAY AFTERNOON POSTER SESSION (2:30-5:30)

P1-1	D. Anderson	Initial Experimental Program Plan for HSX
P1-2	V. Sakaguchi	Initial Results of Magnetic Surface Mapping in HSX
P1-3	S. Gerhardt	Monte-Carlo Diffusion Calculations and Plans for Electric Field Studies in HSX
P1-4	J. Shafii	Design and Testing of the HSX Transmission-Line Components
P1-5	J. Geiger	Fokker-Planck Estimation of Electron Distribution Functions for High Power ECCD at W7-AS
P1-6	W. Kernbichler	Application of the Stochastic Mapping Technique to Modeling the Distribution Function in Stellarator Geometry
P1-7	B. Carreras	On the beta limit Induced by Ideal Interchange Modes in Stellarator Configurations
P1-8	P. Cuthbert	Anderson-localized ballooning modes In general toroidal plasmas
P1-9	Lewandowski	Hybrid Drift Wave Model in Stellarator Geometry
P1-10	G. Fu	MHD Stability in Compact Stellarators
P1-11	L. Ku	Properties of High Beta, Quasi-Axisymmetric NCSX Stellarator Configs.
P1-12	D. Monticello	PIES Applications to NCSX
P1-13	M. Redi	Robustness and Flexibility in NCSX: Global Ideal MHD Stability and Energetic Particle Transport
P1-14	H. Mynick	NCSX Transport Studies
P1-15	M. Zarnstorff	NCSX GOALS and PROJECTED PLASMAS
P1-16	A. Boozer	Optimization of Stellarator Coils
P1-17	M. Drevlak	Optimization of Heterogenous Magnet Systems
P1-18	J. Hanson	Fixing Stellarator Magnetic Surfaces
P1-19	S. Knowlton	MHD Stability and Disruption Studies of Current-Carrying Plasmas in the Upgraded Compact Auburn Torsatron
P1-20	A. Shimizu	Magnetic Coil System for CHS-qa
P1-21	D. Spong	Heating, Energetic Particle Confinement, And Transport in Quasi-Omnigenous Stellarators
P1-22	L. Berry	Self-consistent bootstrap current in Quasi-omnigenous stellarators
P1-23	S. Hirshman	Calculation of coils for low aspect ratio Stellarators using the COILOPT code
P1-24	M. Cole	Status of Engineering Design Studies For the Quasi-Omnigenous Stellarator
P1-25	R. Torasso	Isodynamical Symmetry on a Single Magnetic Surface of a Toroidal MHD Plasma
P1-26	J. Kisslinger	Low Aspect Ratio Helias Configurations
P1-27	Y. Nishimura	Neoclassical particle transport in quasi-Helical and omnigenous systems
P1-28	M. Yokoyama	Role of the Bumpy Field on Confinement And the possibility of Quasi-Poloidally Symmetric (QPS) Stellarator Configuration
P1-29	Y. Sato	Complete Suppression of Pfirsch-Schluter Current in a Toroidal L=3 Stellarator

TUESDAY EVENING

WORKSHOP BANQUET IN GRAND TERRACE ROOM EAST

CASH BAR AT 5:30

COMPLEMENTARY BEER AND SOFT DRINKS

DINNER SERVED AT 6:15

WEDNESDAY MORNING

SEPTEMBER 29

8:30-10:35 TRANSPORT

8:30-8:55 Grigull "A New H-mode Operational Range in W7-AS"

8:55-9:20 Baldzuhn "Optimized Confinement in W7-AS"

9:20-9:45 Castejon "Transport Evaluation in TJ-II Plasmas"

9:45-10:10 Pavlichenko "Ion Thermal Diffusivity in High Ion Temperature Mode in CHS Heliotron/Torsatron Plasma"

10:10-10:35 Wobig "On Guiding Center Orbits in Stellarator Configurations"

10:35-11:05 BREAK

11:05-12:25 PLASMA HEATING

11:05-11:35 Laqua "Overview on ECRH Experiments at the Wendelstein -AS Stellarator"

11:35-12:00 Hartmann "Recent Progress with ICRF Heating on the Stellarator W7-AS"

12:00-12:25 Seki "ICRF Heating Experiments on LHD"

12:30-2:00 LUNCH (ON YOUR OWN)

WEDNESDAY AFTERNOON

2:00-3:40 PLASMA EDGE AND DIAGNOSTICS

2:00-2:25 Morita "A Role of the Ergodic Layer Plasma in Large Helical Device"

2:25-2:50 Feng "Modeling and Simulation of the W7-AS Island Divertor"

2:50-3:15 McCormick "Edge Diagnostic Overview for the W7-AS Divertor Phase"

3:15-3:40 R. Konig "Overview of the W7-X Diagnostic System"

HSX OPEN HOUSE AT 4:00

All Workshop participants are cordially invited to attend an "Open House" at HSX, where beer, coffee and soft-drinks will be served.

A "Traditional Wisconsin Tailgate" buffet will be served from 5:00 to 6:30.

Shuttle buses will run continuously from Monona Terrace to the HSX Laboratory and to local hotels from 3:45 through 7:15.

THURSDAY MORNING SEPTEMBER 30

8:30-10:30 MHD

8:30-8:55 Weller "Survey of MHD Instabilities in W7-AS"

8:55-9:20 Sakakibara "Experimental Study on Finite beta Effect and MHD Instabilities in LHD"

9:20-9:45 Hegna "Theory of Pressure-induced Magnetic Islands in 3-D MHD Equilibria"

9:45-10:10 Sanchez "Techniques for Efficient Ballooning Stability Optimization of QOS Equilibrium Configurations"

10:10-10:40 BREAK

10:40-12:20 TRANSPORT AND REACTORS

10:40-11:05 Yamazaki "LHD Experimental Transport Analysis and its Reactor Projection"

11:05-11:30 Nuhrenberg, "Alpha-Particle Confinement Optimizations in Quasi-Axisymmetric Configurations"

11:30-11:55 Wobig "Progress in Helias Reactor Studies"

11:55-12:20 Lyon "Compact Stellarator Reactors"

LUNCH (ON YOUR OWN)

THURSDAY AFTERNOON POSTER SESSION (2:00-5:00)

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|-------|----------------|---|
| P2-1 | S. Murakami | Neoclassical Transport of Energetic ion
In NBI Heated Heliotrons |
| P2-2 | Y. Hirooka | Particle Balance Modeling for Steady-
State Fusion Devices and its application
To the recent observations in LHD |
| P2-3 | K. Nishimura | Topics of Helium Discharge in LHD |
| P2-4 | K. Ichiguchi | Ideal and Resistive Stability of Free-
Boundary LHD Equilibria |
| P2-5 | S. Knowlton | Plasma Production Studies on CHS with
The Nagoya Type-III Antenna |
| P2-6 | O. Pavlichenko | On the Measurement of Poloidal Rotation Velocity in Magnetically Confined
Plasmas Via Poloidal Correlation Reflectometry |
| P2-7 | C. Wendland | Bootstrap and Neutral Beam Driven
Current at the W7-AS Stellarator |
| P2-8 | J. Geiger | Toroidal Net Current Densities viewed by
Magnetic Diagnostics at W7-AS |
| P2-9 | E. Sallander | Effects of non-vanishing toroidal current
Densities on stability in the Wendelstein 7AS |
| P2-10 | A. Ware | Multi-processing Optimization for
Compact Stellarators |
| P2-11 | S. Hudson | Ballooning mode stability in a quasi-
Helically symmetric stellarator |
| P2-12 | H. Wobig | Simulation of Drift-Alfven Turbulence
In Advanced Stellarator Geometry |
| P2-13 | C. Beidler | An Improved Formulation of Ripple-
Averaged Kinetic Theory |
| P2-14 | R. Ball | Singularity theory study of over
Determination in models for L-H
Transitions |
| P2-15 | N.P. Basse | Two-Point Correlation Measurement
Of Density Fluctuations in the W7-AS
Stellarator |

- P2-16 J. Knauer Density Profile Effects in H-Mode Discharges Observed by High Resolution Thomson Scattering at W7-AS
- P2-17 E. Ascasibar Energy Content and Magnetic Configuration Scan in TJ-II Plasmas
- P2-18 B. Zurro Poloidal Rotation Measurements in the TJ-II Flexible Helic
- P2-19 M. Ochando Confinement of Fast Electrons at Rational Surfaces in the TJ-II Stellarator
- P2-20 E. de la Luna Electron Cyclotron Emission Measurements In TJ-II Stellarator Plasmas
- P2-21 J. Herranz Profile Structures of TJ-II Stellarator Plasmas
- P2-22 F. Sano Construction of Heliotron-J
- P2-23 T. Mizuuchi Structure of Edge Magnetic Field in Heliotron-J
- P2-24 V. Chechkin Experimental Studies of Electric Currents In the Divertor Plasma of a Heliotron/Torsatron
- P2-25 D. Hildebrandt Limiter Thermography on the Stellarator W7-AS with a magnetic Island Topology At the plasma edge
- P2-26 R. Konig Investigation of Boundary Island Configurations on the W7-AS Stellarator
- P2-27 J. Sallander A High-spatial resolution H-alpha Diagnostic for the Divertor phase of Wendelstein-7AS

FRIDAY MORNING

OCTOBER 1

8:30-12:00 NEW CONFIGURATIONS: QA AND QO

8:30-9:10 Rieman "Plasma Configuration Design of the National Compact Stellarator Experiment (NCSX)"

9:10-9:35 Miner "Using the Genetic Algorithm to find Coils for Compact Stellarators"

9:35-10:00 Okamura "Physics and Engineering Design Study of a Quasi-Axisymmetric Stellarator CHS-qa"

10:00-10:30 BREAK

10:30-10:55 Garabedian "Compact Stellarators with Modular Coils"

10:55-11:35 Lyon "Optimization of a Quasi-Omnigeneous Stellarator"

WORKSHOP CLOSES