

**Innovative Confinement Concepts Workshop and  
US-Japan Workshop on the Improvement in the Confinement of Compact Torus Plasmas  
Poster Session: Tuesday and Thursday 1:00 and 5:00 p.m. and Wednesday at 4:30 p.m.**

<b>Poster #</b>	<b>Author</b>	<b>Title</b>
IP.001	Masayoshi Nagata	Studies of helicity-driven MHD relaxation and its control by rotating magnetic field on HIST
IP.002	Gennady Fiksel	Transport of momentum by tearing modes in the MST RFP
IP.003	Ioan Bogatu	C60-Fullerene Hyper-Velocity High-Density Plasma Jets for MIF and Disruption Mitigation
IP.004	Amiya Sen	The First Basic Experiment on the Production and Identification of ETG Modes
IP.005	Scott Wilks	Fast Ignition Using Electron-Positron Jets
IP.006	Vladimir Svidzinski	Plasma confinement by rotating magnetic field in toroidal geometry
IP.007	John Sarff	A Hybrid Inductive Scenario for a Nearly Steady-State Reversed Field Pinch
IP.008	John Slough	Got Tritium?
IP.009	Charles Hartman	Fast z-pinch compression of small-radius, cylindrical liner
IP.010	Michel Laberge	Experimental results for an acoustic driver for MTF
IP.011	Piero Martin	Overview of RFX-mod results
IP.012	Sadao Masamune	MHD Properties of Low-Aspect Ratio RFP in RELAX
IP.013	Brian Nelson	Recent Results from the Steady-Inductive Helicity Injected Torus (HIT-SI)
IP.014	David Anderson	Transport in a Quasisymmetric Plasma: Results from HSX
IP.015	Thomas Pedersen	Studies of non-neutral plasmas in the CNT stellarator
IP.016	Harry Mclean	Final Results from the SSPX Spheromak Program
IP.017	Bick Hooper	Visualizing magnetic reconnection in the SSPX spheromak
IP.018	Xianzhu Tang	Reactor Prospect of Spheromak Concept by Electrostatic Helicity Injection
IP.019	George Votroubek	Improved Compression of Merged Field Reversed Configuration Plasmas in the IPA Experiment
IP.020	Tim Gray	Stable high-flux oblate FRCs in SSX
IP.021	Stephen Howard	Development of Merged Compact Toroids for use as an MTF plasma
IP.022	Samuel Cohen	The Princeton FRC Research Program
IP.023	Michiaki Inomoto	High-beta steady-state FRC plasmas sustained by rotating magnetic fields with spatial high-harmonic components
IP.024	Elena Belova	Simulation Studies of Field-Reversed Configurations with Rotating Magnetic Field Current Drive
IP.025	Uri Shumlak	Stabilization in the ZaP Flow Z-Pinch
IP.026	Ioana Paraschiv	Linear and nonlinear development of m=0 instability in z-pinch equilibria with sheared axial flows
IP.027	Roger Raman	Solenoid-free Plasma Start-up in NSTX using Transient CHI
IP.028	William Hamp	Closed flux sustainment during Coaxial Helicity Injection discharges and the requirements for flux amplification in the Helicity Injected Torus-II
IP.029	Aaron Redd	Non-inductive plasma startup and current profile modification in Pegasus spherical torus discharges
IP.030	Richard Ellis	Maryland Centrifugal Experiment : Progress and Plans
IP.031	Catalin Teodorescu	Experimental study on the velocity limits of magnetized rotating plasmas
IP.032	Dmitri Ryutov	Non-paraxial stabilizers for axisymmetric mirrors
IP.033	Tom Intrator	FRCHX Magnetized Target Fusion and FRC Translation Experiments
IP.034	Bruno Bauer	Plasma formation and evolution from an aluminum surface driven by a megagauss field, as in magneto-inertial fusion
IP.035	John Perkins	Shock Ignition: A New Approach to High Gain Targets for the National Ignition Facility and Inertial Fusion Energy

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IP.036	Grant Logan	A Candidate 1MJ Modular Driver Concept for Heavy Ion Fusion Direct Drive
IP.037	George Miley	Novel Cluster High Performance Target
IP.038	James Knauer	Magnetized Hot-Spot Implosions on OMEGA
IP.039	Alexander Boxer	Measurements of Improved Confinement During Magnetic Levitation of a Superconducting Dipole
IP.040	Brian Grierson	The Turbulent Structure of a Plasma Confined by a Magnetic Dipole
IP.041	Paul Bellan	How does the plasma get in to a spheromak?
IP.042	Deepak Kumar	Alfvénic plasma flow during spheromak preformation stage
IP.043	Houyang Guo	Achievement of a New High-Confinement, Collisionless FRC State in TCS-Upgrade
P.044	Jay Kesner	The LDX Experiment and the Levitated Dipole Approach to Plasma Confinement
P.045	Jennifer Ellsworth	Low Frequency Fluctuations During Levitated Operation the LDX Plasma
P.046	Mike Mauel	Reconstruction of Pressure Profile Evolution during Levitated Dipole Experiments
P.047	Matthew Worstell	Measuring Interchange Turbulent Structure Coupling by Exciting Strong Nonaxisymmetric Flows
P.048	Cihan Akcay	NIMROD simulations of decaying and driven HIT-SI plasmas
P.049	Charlson Kim	Preliminary Simulation Results from PSI Center NIMROD effort
P.050	Jonathan Wrobel	Overview of HIT-SI Diagnostic Systems and Upgrades
P.051	Auna Moser	Magnetic field amplification and neutral gas ionization when a plasma jet collides with a neutral gas target
P.052	Rory Perkins	A Low Cost Photo-Electric Detector for an Arched Twisted Flux Tube Experiment
P.053	James Grossnickle	Wall Conditioning and Impurity Content in TCS-Upgrade
P.054	Aydin Tankut	Surface Analysis Studies of TCSU Components
P.055	Weston Lowrie	Interfacing a Low Order Mesh Generator with a High Order Finite (Spectral) Element Code
P.056	Vyacheslav Lukin	Development and validation of HiFi -- an adaptive implicit 3D high order finite element code for general multi-fluid applications.
P.057	George Marklin	Application of Mimetic Operators to Tetrahedral Mesh MHD Codes
P.058	Eric Meier	Multi-Fluid MHD Simulation of FRC Translation
P.059	Jeong-Young Ji	Moment approach to deriving unified parallel ion viscous stress in magnetized plasmas
P.060	Carl Sovinec	Computation for Two-fluid Relaxation Physics
P.061	Richard Milroy	FRC Formation and Translation Simulations using the NIMROD Code
P.062	Chavis Raynor	Weak Magnetic Fields for Manipulation of Turbulent Transport in Magnetically Confined Plasmas
P.063	Charles Weatherford	Quantum Fluid Dynamic Extension of the Ginzburg-Landau Equation for Transition to Turbulence in Magnetized Fusion Plasmas
P.064	Friedwardt Winterberg	Attainment of Gigavolt Potentials by Fluiddynamic Suppression of the Stepped Leader - Its Significance for Thermonuclear Ignition
P.065	Keith Jackson	Rationale for a Spheromak Fusion Facility at Florida A&M University
P.066	Angus Macnab	Extended MHD Simulations of the Formation, Compression, and Stability of Compact Tori for Current Drive and Heating
P.067	John Slough	Small Scale Fusion: The Pulsed High Density FRC Experiment
P.068	Setthivoine You	Measuring 3D Plasma Velocity in the TS-4 Compact Toroid
P.069	Loren Steinhauer	Solver for flowing multi-fluid equilibria
P.070	Simon Woodruff	Compression of Compact Tori for Current Drive and Heating
P.071	Sean Knecht	Results of Inner Electrode Modification on the ZaP Flow Z-Pinch
P.072	Tomohiko Asai	Control of plasma dynamics in a translation process of field-reversed configuration

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P.073	Raymond Golingo	Thomson Scattering Measurements on the ZaP Experiment
P.074	David Maurer	HBT-EP Magnetohydrodynamic Control Research: Progress and Plans
P.075	Karsten McCollam	Energy and Helicity Balance in Oscillating Field Current Drive Experiments
P.076	Ilker Uzun	Dense Plasma Injection Experiment at MCX
P.077	Uzun-Kaymak	Observations and simulations of magnetic fluctuations in MCX
P.078	Brett Chapman	Generation and confinement of hot ions and electrons in MST
P.079	Stephen Knowlton	Current Driven Instability Studies on the Compact Toroidal Hybrid
P.080	Devon Battaglia	Non-solenoidal Plasma Startup using Outboard Washer Gun Current Injection on the Pegasus Toroidal Experiment
P.081	Seung Choi	Observations and analysis of magnetic fluctuations in the Maryland Centrifugal Experiment
P.082	Jane Pratt	Drift-wave eigenmodes and spectral gaps in tandem mirrors
P.083	Dmitri Ryutov	Hydrodynamic efficiency of the liner-target interaction in the "soft-landing" mode
P.084	Milena Angelova	Numerical Study of plasma formation from thick and thin aluminum wires driven by megaampere currents
P.085	Thomas Awe	Pulsed Megagauss Magnetic Field on Millimeter Diameter Aluminum Rods
P.086	Stephan Fuelling	EUV warm dense plasma emission from an aluminum surface driven by MG fields
P.087	Volodymyr Makhin	Numerical modeling of Zebra MG experiment shows generation of warm dense matter and surface plasma
P.088	John Santarius	Exploration of Plasma-Jet Magneto-Inertial Fusion 1-D Burn Dynamics
P.089	Piotr Wiewior	Status of Leopard laser project in Nevada Terawatt Facility
P.090	George Miley	A Neutron Generator based on Magnetically Focused and Stabilized Linear IEC
P.091	Simon Woodruff	Spheromak development path
P.092	Carlos Romero-Talamás	Magnetic and thermal evolution in sustained spheromaks: experiments and simulations
P.093	Ammar Hakim	Time Domain Integral Equation Methods for use in fast MHD simulations of pulsed-power devices
P.094	John Loverich	An approach to dealing with plasma vacuum boundaries in FRC and Z-Pinch modeling
P.095	Radu Presura	Effect of an axial sheared flow on the wire array z-pinch
P.096	Radu Presura	Plasma expansion across magnetic field
P.097	John Finn	The effect of line-tying on tearing modes
P.098	Chris Hegna	Local 3-D equilibria with magnetic islands
P.099	Robert Horton	Poloidal Field Amplification in CTIX
P.100	Tobin Munsat	Progress on the Colorado FRC Experiment
P.101	David Ennis	Tearing Mode Flows and the MHD Dynamo in MST