Monday, February 12, 2007

7:45   Continental Breakfast

8:45   Welcome and Administrative Matters

*High-Beta Magnetic Confinement: RFP, MCX, LDX, Pegasus, and ZaP*  
Chair: Darren Garnier

9:00   Generation and confinement of hot thermal ions through the manipulation of magnetic reconnection in the reversed field pinch  
Sanjay Gangadhara

9:20   High beta, high density improved confinement reversed-field pinch plasmas  
Max Wyman

9:40   Progress on the Maryland centrifugal experiment  
Adil Hassam

10:00  Break

10:30  Overview of results from supported mode operation of the Levitated Dipole Experiment  
Jennifer Ellsworth

10:50  Non-inductive startup using localized washer gun plasma sources on the Pegasus Toroidal Experiment  
Nicholas Eidietis

11:10  Stabilization in the ZaP flow Z pinch  
Uri Shumlak

11:30  Panel Discussion

12:00  Lunch ~ Complimentary to registered attendees

1:00   Poster Session #1

*Inertial Fusion Energy Research*  
Chair: John Perkins

2:30   The national ignition facility and its future role in inertial fusion energy  
Edward Moses

2:50   A European path to fast ignition fusion energy  
Mike Dunne

3:10   Laser fusion energy and the fusion test facility  
John Sethian
3:30  Break

4:00  Innovations for warm dense matter research may lead to improved heavy ion fusion approach  Grant Logan

4:20  Magneto inertial implosion experiments on the OMEGA laser  Orlin Gotchev

4:40  Shock ignition of thermonuclear fuel with high areal densities  Riccardo Betti

5:00  Panel Discussion

Non-Technical Session  Chair: Stephen Knowlton

7:30  Update from OFES  TBA

8:00  ICC Program  Francis Thio

8:30  One Pager Discussion  Stephen Knowlton

Tuesday, February 13, 2007

8:00  Continental Breakfast

High-Beta and Simply Connected: FRC  Chair: Alan Hoffman

9:00  RMFo-formed collisionless high-beta plasmas: Yesterday, today and tomorrow  Samuel Cohen

9:20  Evidence of relaxation and spontaneous transition to a high-confinement state in high-beta steady-state plasmas sustained by rotating magnetic fields  Houyang Guo

9:40  Ohmic sustainment of free boundary compact toroids in MRX  Gerhardt Stefan

10:00  Break

10:30  Issues for a magnetized target fusion reactor  Glen Wurden

10:50  The Pulsed High Density Experiment: Initial results from the dynamic formation of high flux FRCs  Samuel Andreason
11:10 Hybrid simulations of rotational instabilities in FRCs

11:30 Panel Discussion

12:00 Lunch ~ Complimentary to registered attendees

1:00 Poster Session #2

Theory and Computation  Chair: James Van Dam

2:30 FRC simulations using the NIMROD code  Richard Milroy

2:50 Two-fluid simulations of field reversed configurations  Ammar Hakim

3:10 Initial comparison of HIT-SI measurements to NIMROD calculations  R. G. O'Neill

3:30 Break

4:00 Startup of spherical tokamak component test facility by co-axial helicity injection  Xianzhu Tang

4:20 Simulation of FLR effects on RFP tearing modes  Charlson Kim

4:40 Tendency of MHD forces to create localized, collimated plasma-filled flux tubes and ion orbit instability in a flux tube  Paul Bellan

5:00 Panel Discussion

ICC Strategy Session  Chair: TBA

7:30 Session TBA

Wednesday, February 14, 2007

8:00 Continental Breakfast

Skunkworks  Chair: Simon Woodruff

9:00 Suitability of small scale linear systems for a fission- fusion reactor, breeder, and waste transmutation  John Slough

9:20 Pressurized gas as a driver for magnetized  Dmitri Ryutov
target fusion

9:40 Nuclear fusion with reduced coulomb barriers  
  John Perkins

10:00 Break

10:30 Linear Connected Array of Non-Adiabatic Traps  
  Hiromu Momota

10:50 New concepts for reducing costs and improving efficiency of solid-state laser drivers for inertial fusion energy  
  Alvin Erlandson

11:10 Panel Discussion

11:30 Lunch ~ Complimentary to registered attendees

12:30 Poster Session #3

Simply Connected and/or Current Drive Solutions:  
  Chair: Bick Hooper
  Spheromaks, Stellarators and Others

2:00 Internal magnetic structure and electric fields in the Helicity Injected Torus with Steady Inductive Helicity Injection (HIT-SI)  
  Aaron Redd

2:20 Flow dynamics and plasma heating of spheromaks in SSX  
  Michael Brown

2:40 Magnetic field generation and sustainment in the SSPX spheromak  
  Harry Mclean

3:00 The search for reconnection and helicity during formation of a bounded spheromak  
  Carlos Romero-Talamas

3:20 Break

3:50 Onset and saturation of the kink instabilities in a current carrying, line-tied plasma surrounded by a resistive shell  
  Cary Forest

4:10 Reduced neoclassical particle and heat transport with quasihelical symmetry in HSX  
  John Canik

4:30 Confinement of pure electron plasmas in the Columbia non-neutral torus  
  John Berkery

4:50 Energy confinement predictions for the Wendell Horton
stabilized Tandem Mirror and GAMMA-10

5:10 Panel Discussion