

**Eleventh US -Japan Workshop  
on  
Heavy Ion Fusion and High Energy Density Physics**

**Thursday, 18 December 2008  
Bldg. 47 Conference Room  
Lawrence Berkeley National Laboratory  
Berkeley, CA USA**

8:30 - 9:00 Coffee and Danishes

**Session 1 Fusion -- John Barnard, chair**

9:00 - 9:05 John Barnard (LLNL) -- Agenda/Workshop Logistics

9:05 - 9:35 Grant Logan (LBNL) -- A new vision for Heavy Ion Fusion

9:35 - 10:05 Shigeo Kawata (Utsunomiya U.) --Robust Heavy Ion Fusion Target

10:05 - 10:20 Coffee Break

**Session 2 Accelerators I -- Shigeo Kawata, chair**

10:20 - 10:50 Ken Takayama (KEK) -- KEK Digital Accelerator and its Beam Dynamics

10:50 - 11:20 Steve Lund (LLNL) -- Beam Stability and Control in Solenoid Transport Channels

11:20 - 13:00 Lunch at LBNL cafeteria

**Session 3 Experiments -- Yoshiyuki Oguri, chair**

13:00 - 13:30 Peter Seidl (LBNL) -- NDCX beam experiments and plans --

13:30 - 14:00 Jun Hasegawa (Tokyo Tech)-- Focusing of MeV Ions Using Tapered Insulator Tubes

14:00 - 14:30 Frank Bieniosek (LBNL) --WDM experiments and plans

14:30 - 15:15 Tour of the experiments -- Frank Bieniosek/Peter Seidl/Pavel Ni

15:15 - 15:30 Coffee Break

**Session 4 -- Warm Dense Matter I - Frank Bieniosek, chair**

15:30 - 16:00 Kazuhiko Horioka (Tokyo Tech) -- Beam and/or Pulse-Power Driven WDM Science in TIT

16:00 - 16:30 I. Kaganovich (PPPL): Collective Effects on Focusing of Intense Ion Beams in Neutralized Drift Compression

16:30 - 17:00 R. More (LBNL): Science of Warm Dense Matter

17:00 - 18:30 Individual discussion/break

18:30 - 20:30 Working Dinner at Angeline's Louisiana Kitchen in Berkeley

**Friday, 19 December 2008  
Grand Canyon Room, B543  
Lawrence Livermore National Laboratory,  
Livermore, CA, USA**

8:00 Meet at Ashby Ave BART station for car pool ride to LLNL

9:00 Badging at LLNL -- Badge office (Westgate)

9:55 Assemble in B543 Grand Canyon Room

10:00 – 10:30 Ed Synakowski (LLNL) -- Introduction to LLNL's Fusion Energy Program  
10:45 -- Leave B543 for NIF tour  
11:00 - 12:00 Tour of NIF  
12:30 - 13:30 Lunch at Cattlemen's restaurant in Livermore  
**13:45 Session 5 – LIFE and Warm Dense Matter II -- Alex Friedman, chair**  
13:45 – 14:15 Erik Storm (LLNL) – Laser Inertial Fusion-fission Energy (LIFE)  
Overview  
14:15 – 14:45 Yoshiyuki Oguri (Tokyo Tech)-- Energy Deposition Profile of Heavy-Ions  
in Warm Dense Targets  
14:45 – 15:15 Pavel Ni (LBNL) – First Experimental Results of WDM Target  
Experiments  
15:15 - 15:30 Coffee break  
**15:30 Session 6 -- Accelerators II -- Kazuhiko Horioka, chair**  
15:30 - 16:00 Hong Qin (PPPL) -- Non-Abelian Courant-Snyder theory for coupled  
transverse dynamics of charged particles in electromagnetic focusing lattices  
16:00 - 16:30 Alex Friedman (LLNL) -- NDCX II Accelerator Design  
16:30 – 16:45 Discussion/ Workshop closing  
16:45 Leave for Berkeley

Japanese delegation:

Jun Hasegawa (Tokyo Tech, [jhasegaw@nr.titech.ac.jp](mailto:jhasegaw@nr.titech.ac.jp) )

Kazuhiko Horioka (Tokyo Tech, [horioaka.k.aa@m.titech.ac.jp](mailto:horioaka.k.aa@m.titech.ac.jp))

Shigeo Kawata (Utsunomiya University, [kwt@cc.utsunomiya-u.ac.jp](mailto:kwt@cc.utsunomiya-u.ac.jp) )

Yoshiyuki Oguri (Tokyo Tech, [yoguri@nr.titech.ac.jp](mailto:yoguri@nr.titech.ac.jp))

Ken Takayama (KEK, [takayama@milky.kek.jp](mailto:takayama@milky.kek.jp) )