

JIFT Japan-US workshop on Theory and simulation on the high field and high energy density physics

March 27 - 28@Hiroshima City Bunka-Koryu-Kaikan, Japan

Day1	Tuesday (03/27)			
9:10	10	Yasuhiko Sentoku	ILE, Osaka	Opening remarks about theory and simulation on the high field and HED physics
Chair	Sentoku		Intense Laser Plasma Interaction (I)	
9:20	25	Amina Hussein	U. Michigan	The role of plasma density and quasi-static plasma structures in the generation of high energy, low divergence electron beams by Direct Laser Acceleration
9:45	25	Natsumi Iwata	ILE, Osaka	Relativistic laser-plasma interaction in the over-picosecond regime
10:10	25	Ryouhei Hanayama	GPI, Hamamatsu	Mechanism of hole boring of free-fallen CD bead targets by ultra-intense lasers
10:35	20 discussion			
10:55	10 coffee break			
Chair	Arefiev		Intense Laser Plasma Interaction (II)	
11:05	25	Masayasu Hata	ILE, Osaka	High intensity laser propagation in strongly magnetized plasma
11:30	25	Ginevra Cochran	Ohio State U	Particle-in-cell modeling of plasma mirrors from dielectric response to saturation
11:55	25	Naoki Higashi	ILE, Osaka	Isochoric heating of dense plasma driven by a multi-picosecond intense laser
12:20	10 discussion			
12:30	60 lunch			
Chair	Johzaki		Intense Laser Plasma Interaction (III)	
13:30	25	Alex Arefiev	UCSD	Probing the onset of laser-induced relativistic transparency in massive targets
13:55	25	Takayoshi Sano	ILE, Osaka	Broadening of cyclotron resonance conditions in the relativistic interaction of an intense laser with overdense plasmas
14:20	25	Yoshitaka Mori	GPI, Hamamatsu	Experimental results of Slow wave excitation using head-on two-color TW laser pulses
14:45	20 discussion			
15:05	10 coffee break			
Chair	Schumacher		LPI & Laser fusion	
15:15	25	Hitoshi Sakagami	NIFS	Laser Plasma Interactions for Super-penetration Mode in Fast Ignition
15:40	25	Yoneyoshi Kitagawa	GPI, Hamamatsu	Fast ignition fusion under counter-beam illumination
16:05	25	Tomoyuki Johzaki	Hiroshima U.	Ignition requirement for RPA C6+ beam driven fast ignition
16:30	20 discussion			
16:50	End of Day1			
19:00	Dinner at Japanese bar			

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Day2

Wednesday (03/28)

Chair	Iwata	Laser Ion Acceleration (I)		
9:00	25 Kunioki Mima	GPI, Hamamatsu	Double Ion Acceleration Driven by Short Pulse Laser	
9:25	25 Douglass Schumache	Ohio State U.	Distinguishing TNSA, RPA-LS and Coulomb explosion ion acceleration regimes	
9:50	25 Toshihiro Taguchi	Setsunan U.	Ion acceleration driven by a relativistic electron beam propagating along a strong magnetic field	
10:15	20 discussion			
10:35	10 coffee break			
Chair	Sunahara	Laser Ion Acceleration (II)		
10:45	25 Ryutaro Matsui	Kyoto U.	Acceleration of ambient gas ions and establishment of a kinetic equilibrium in boundary layers created by a Coulomb explosion of a cluster	
11:10	25 Kathleen Weichman	UCSD	Ion acceleration by a ps-long laser pulse in an applied magnetic field	
11:35	25 Daiki Kawahito	Kyoto U.	Ionization and acceleration of multiply charged ions in high-Z film irradiated by high intensity laser	
12:00	20 discussion			
12:20	60 lunch			
Chair	Mori	LPI, Strong Magnetic Field & Hydro		
13:20	25 John Palastro	LLE	Spatiotemporal control of laser intensity for plasma-based applications	
13:45	25 Huan Li	ILE, Osaka	Guiding of PW laser accelerated electron beams by self-generated magnetic field for creation of high-energy-density matter	
14:10	25 Atsushi Sunahara	Purdue University	Radiation hydrodynamic simulation of pre-formed plasmas on TNSA laser acceleration and magnetized fast ignition	
14:35	20 discussion			
14:55	10 coffee break			
Chair	Sano	LPI, Strong Magnetic Field & Hydro (II)		
15:05	25 Hiroki Morita	ILE, Osaka	Duration and Strength Dependencies for Pulsed Magnetic Diffusion	
15:30	25 Hideo Nagatomo	ILE, Osaka	Non-local electron thermal conduction models for radiation hydrodynamic simulation	
15:55	20 discussion & summary			
16:15	workshop adjourned			