

Monday	May 12		
8:45-9:00	Information		
S-1	<i>Stellar explosions</i>	Chair: Serge Bouquet	
9:00-9:30		Shigehiro NAGATAKI	Supernova Explosions: From Engine to Remnant
9:30-9:50		Yonatan ELBAZ	Studying the evolution of hydrodynamic instabilities using high power lasers
9:50-10:05		Tomasz PLEWA	Core-Collapse Supernova Explosions and Experiments on the National Ignition Facility
10:05-10:20		Oliver PIKE	Observing two-photon pair production for the first time in the laboratory
10:30-11:00	Coffee break		
S-2	<i>Stellar astrophysics</i>	Chair: Claire Michaut	
11:00-11:30		Daniel CASEY	Opening new opportunities in nuclear astrophysics with plasma nuclear science
11:30-11:50		Manoel COUDER	Nuclear astrophysics studies with charged particles in hot plasma environments
11:50-12:05		Guillaume LOISEL	Progress and status of ZAPP: The Z astrophysical plasma properties collaboration
12:05-12:20		Uddhab CHAULAGAIN	Laser experiments on Radiative Shocks relevant to Stellar Accretion
12:30-14:00	Lunch		
14:00-15:30	<i>Posters 1</i>		
15:30-16:00	Coffee break		
S-3	<i>Computations</i>	Chair: Tomek Plewa	
16:00-16:30		Samuel FALLE	Computational Astrophysical Fluid Dynamics
16:30-16:50		Ricardo FONSECA	Particle-in-cell methods in application to modeling astrophysical and HED plasmas
16:50-17:05		Hideaki TAKABE	Modeling high-energy astrophysics phenomena with ultra-intense lasers
17:05-17:20		Petros TZEFERACOS	FLASH magnetohydrodynamic simulations of experiments that study shockgenerated magnetic fields

Tuesday	May 13		
8:45-9:00	Information		
S-4	<i>Magnetized HEDLA</i>	Chair: Adam Frank	
9:00-9:30		Jiayong ZHONG	The study of magnetic reconnection with Shenguang II lasers
9:30-9:50		Lee SUTTLE	Structure of reverse shocks formed in the collision of a supersonic, magnetized plasma flow with a planar obstacle
9:50-10:05		Hye-Sook PARK	Astrophysically relevant electromagnetic plasma instabilities in high-power laser generated counter-streaming plasma flows
10:05-10:20		Matthew BENNETT	Formation of Radiatively Cooled, Differentially Rotating, Plasma Disks in Z-pinch Experiments
10:30-11:00	Coffee break		
S-5	<i>Plasma physics</i>	Chair: Sergey Lebedev	
11:00-11:30		Pisin CHEN	Laser cosmology
11:30-11:50		Carolyn KURANZ	Radiative shocks in the high-energy-density physics regime
11:50-12:05		Dongsu RYU	Diffusive Shock Acceleration at Shock Waves in the Intracluster Medium
12:05-12:20		Guy MALAMUD	A two dimensional, singlemode KH experiment on EP
12:30-14:00	Lunch		
S-6	<i>Radiative Hydrodynamics</i>	Chair: Robin Williams	
14:00-14:30		Howard SCOTT	Non-LTE Effects in Radiation-Hydrodynamics Simulations
14:30-14:50		Matthias GONZALEZ	Radiative shocks
14:50-15:05		Adam FRANK	Shock-Cloud Interactions and Triggered Star Formation
15:05-15:20		Javier SANZ	New results on the Sedov–Taylor point explosion linear stability: application to Ryu–Vishniac and Vishniac instabilities
15:30-16:00	Coffee break		
S-7	<i>Warm Dense Matter</i>	Chair: Michel Koenig	
16:00-16:30		Alessandra BENUZZI-MOUNAIX	Investigation of SiO ₂ in the regime of the Warm Dense Matter : applications to the planetology
16:30-16:50		Richard KRAUS	Shock Thermodynamics of Iron and Impact Vaporization of Planetary Cores
16:50-17:05		Bruce REMINGTON	New regimes of solid-state plastic flow at extreme conditions for laboratory astrophysics

Wednesday	May 14		
8:45-9:00	Information		
S-8	Computations	Chair: Andrea Ciardi	
9:00-9:30		William RIDER	What you do and do not get from V&V
9:30-9:50		Bart Van der HOLST	Radiation hydrodynamics methods and simulations of high-energy-density plasmas
9:50-10:05		Feilu WANG	Particle simulation of photoionization by high power laser
10:05-10:20		Frederico FIUZA	One-to-one PIC modeling of laboratory studies of collisionless shocks
10:30-11:00	Coffee break		
S-9	Jets and outflows, and LMJ/Petal	Chair: Patrick Hartigan	
11:00-11:30		Sylvie CABRIT	YSO jets
11:30-11:50		Andrea CIARDI	Astrophysics of Magnetized Jets Generated from Laser-Produced Plasmas
11:50-12:05		Alessandra RAVASIO	Inertial collimation mechanisms in nested outflows
12:05-12:20		Joseph CROSS	Laboratory Investigation of Accretion Shocks at the Orion Laser Facility
12:20-12:45		Alexis Casner	LMJ/PETAL: overview and status
12:45-14:00	Lunch		
14:00-18:00	LMJ visit and CELIA visit		
19:45-23:00	Gala Dinner		

Thursday	May 15		
8:45-9:00	Information		
S-10	<i>Stellar astrophysics</i>	Chair: Xavier Ribeyre	
9:00-9:30		Aake NORDLUND	Star and Planet Formation
9:30-9:50		Michael MONTGOMERY	Progress on the White Dwarf Photosphere Experiment on the Z Machine
9:50-10:05		Maelle LE PENNEC	Opacity experiments for stellar physics on LMJ+PETAL
10:05-10:20		R. Paul DRAKE	Studies of Shock Waves and Related Phenomena Motivated by Astrophysics
10:30-11:00	Coffee break		
11:00-12:30	<i>Posters 2</i>		
12:30-14:00	Lunch		
S-11	<i>Jets and outflows</i>	Chair: Paul Bellan	
14:00-14:30		Francisco SUZUKI-VIDAL	Magnetised shocks in current-driven counter-streaming plasma jets
14:30-14:50		Patrick HARTIGAN	Exploring Astrophysical Shock Wave Dynamics in the Laboratory
14:50-15:05		Chikang LI	Structure and Dynamics of Colliding Plasma Jets
15:05-15:20		Clotilde BUSSCHAERT	POLAR Project : laboratory simulation of accretion process onto highly magnetized white dwarf
15:30-16:00	Coffee break		
S-12	<i>Warm Dense Matter</i>	Chair: Bruce Remington	
16:00-16:30		Tristan GUILLOT	Probing the interiors of planets inside and outside our solar system: Status & perspectives
16:30-16:50		Kosuke KUROSAWA	The thermodynamic response of silicate minerals after meteoritic impacts: Implications for the evolution of planetary atmospheres
16:50-17:05		François SOUBIRAN	Hydrogen-Water Mixtures in Giant Planet Interiors Studied with Ab Initio Simulations
17:05-17:20		Emmanuel D'HUMIERES	Energy transfer, stochastic heating and radiation emission in counter-propagating plasmas at sub-relativistic velocities
17:40	<i>Conference Photo</i>		

Friday	May 16		
8:45-9:00	Information		
S-13	<i>Radiative Hydrodynamics</i>	Chair: Feilu Wang	
9:00-9:30		Robin WILLIAMS	Interface Physics in Laboratory and Astrophysical Plasmas
9:30-9:50		Arthur PAK	Generation of spherical radiative shock waves from ICF implosions
9:50-10:05		Alexis CASNER	Long duration drive hydrodynamics experiments relevant for laboratory astrophysics
10:05-10:20		Neil VAYTET	Shock waves and star formation using multigroup radiation hydrodynamics
10:30-11:00	Coffee break		
S-14	<i>Stellar explosions</i>	Chair: Carolyn Kuranz	
11:00-11:30		Martin OBERGAULINGER	Multidimensional modelling of stellar core collapse and explosion
11:30-11:50		Andrey ZHIGLO	Theory and modeling of thermonuclear supernova flames
11:50-12:05		Mathieu LOBET	Ultra-fast thermalization of laser-driven ultra-relativistic plasma flows: towards the generation of collisionless pair shocks in the Laboratory
12:05-12:20		Edison LIANG	Ultra-intense Pair and Gamma-ray Creation using the Texas Petawatt Laser and Astrophysical Applications
12:30-14:00	Lunch		
S-15	<i>Magnetized HEDLA</i>	Chair: R. Paul Drake	
14:00-14:30		Patrick HENNEBELLE	On the role of magnetic fields in the ISM and star formation
14:30-14:45		Philipp KORNEEV	Collisionless magnetized plasma interaction in the context of astrophysical experiments
14:45-15:00		Mario J.-E. MANUEL	Magnetization Effects on Collimated Plasma Jets
15:00-15:30	Coffee break		
S-16	<i>Plasma physics</i>	Chair: Hideaki Takabe	
15:30-16:00		Gianluca GREGORI	Turbulence and magnetic field generation in the laboratory and astrophysics
16:00-16:20		Hyeon PARK	Magnetic reconnection process in the core of toroidal plasmas
16:20-16:35		Paul BELLAN	Fast Magnetic Reconnection From Taking into Account Electron Inertia and Hall Physics
16:35-16:50		Youichi SAKAWA	Collisionless shock experiments using large-scale lasers
16:50-17:15	<i>Closing remarks</i>		