

Plenary sessions**2023/6/6-9 8:00-12:00**

Plenary Session I 2023/6/6
8:30-9:10 Plenary Presentation 1 Pulsed laser heating with time-resolved analysis: A new tool to explore material properties at extreme conditions Catherine McCammon , University of Bayreuth, Germany
9:10-9:50 Plenary Presentation 2 The Deep Potential model – pretraining and long-range interactions Han Wang (王涵) , Institute of Applied Physics and Computational Mathematics, China
Plenary Session II 2023/6/6
10:40-11:20 Plenary Presentation 3 Ultrahigh Intensity CPA Lasers: Development and Applications Chang Hee Nam , Center for Relativistic Laser Science, IBS, South Korea
11:20-12:00 Plenary Presentation 4 Progress in laboratory astrophysics research on Shenguang laser facilities Jiayong Zhong (仲佳勇) , Beijing Normal University, China
Plenary Session III 2023/6/7
8:00-8:40 Plenary Presentation 5 Ultra-bright laser-driven sources of MeV particles and radiation using long-scale foams irradiated with sub-ps pulses Olga Rosmej , GSI Helmholtzzentrum für Schwerionenforschung GmbH, Germany
8:40-9:20 Plenary Presentation 6 Laser Plasma Instability in Indirect-Drive Inertial Confinement Fusion on Shenguang Laser Facilities Dong Yang (杨冬) , Laser Fusion Research Center, China Academy of Engineering Physics, China
9:20-10:00 Plenary Presentation 7 Astrophysics with high-power lasers and laboratory plasmas Andrea Ciardi , Sorbonne University and Paris Observatory, France
Plenary Session IV 2023/6/7

10:40-11:20 Plenary Presentation 8 Next-generation of Z-Pinch Facility aim for ICF Meng Wang (王勳) , Institute of Fluid Physics, China Academy of Engineering Physics, China
11:20-12:00 Plenary Presentation 9 On the precise prediction of aerothermal radiation during atmospheric reentry Quanhua Sun (孙泉华) , Institute of Mechanics, Chinese Academy of Sciences, China
Plenary Session V 2023/6/8
8:00-8:40 Plenary Presentation 10 Femtosecond time-resolved dynamics of fast electrons in relativistic laser-foil interactions Yutong Li (李玉同) , Institute of Physics, Chinese Academy of Sciences, China
8:40-9:20 Plenary Presentation 11 The use of AM foams in laser-plasma interaction experiments Vladimir Tikhonchuk , France;ELI-Beamlines; Institute of Physics CAS; Czech Republic and CELIA; University of Bordeaux, Russia
9:20-10:00 Plenary Presentation 12 Control of high-current relativistic electron beam and its applications Taiwu Huang (黄太武) , Shenzhen Technology University, China
Plenary Session VI 2023/6/8
10:40-11:20 Plenary Presentation 13 Hydrogen and Deuterium and their interaction at high compressions Eugene Gregoryanz , The University of Edinburgh, UK
11:20-12:00 Plenary Presentation 14 Superradiance and temporal coherence in plasma accelerators: New pathways towards FEL brightnesses in plasma Jorge Vieira , Instituto Superior Tecnico, Lisbon, Portugal
Plenary Session VII 2023/6/9
8:00- 8:40 Plenary Presentation 15 Yanming Ma , Jilin University, China

8:40-9:20 Plenary Presentation 16

Simple Models of Equations of State for Refractory Metals at High Energy Densities

Konstantin Khishchenko, Joint Institute for High Temperatures RAS; Moscow Institute of Physics and Technology; South Ural State University; Federal Research Center of Problems of Chemical Physics and Medicinal Chemistry RAS, Russia

MRE Forum

2023/6/9 10:00-11:20

Theme: Metallization and Superconductivity of Hydrogen

Date: June 9, 2023

Chair: Ho-kwang Mao

Panel speakers:

Ho-kwang Mao, Shanghai Advanced Research in Physical Sciences (SHARPS), China, The Center for High Pressure Science & Technology Advanced Research (Hpstar), China

Yanming Ma, Jilin University, China

Liling Sun, Institute of Physics, CAS, China

Viktor Struzhkin, the Center for High Pressure Science & Technology Advanced Research, China, Carnegie Institution for Science Geophysical Laboratory, US

Eugene Gregoryanz, the University of Edinburgh, UK

Thomas Meier, the Center for High Pressure Science & Technology Advanced Research (Hpstar), China

Parallel sessions

2023/6/6 14:00-18:00 Tuesday

Fundamental Physics at Extreme Light Fundamental Physics-I Parallel Session I 2023/6/6
Invited presentation I-1 14:00-14:20 Relativistic laser interaction with structured plasmas Alexander Pukhov , University of Dusseldorf, Germany
Invited oral presentation I-2 14:20-14:35 Laser compression via fast-extending plasma gratings Zhaohui Wu (吴朝辉) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Oral presentation I-3 14:35-14:50 Efficient generation of axial magnetic field by multiple laser beams with twisted pointing directions Yin Shi (时银) , University of Science and Technology of China, China
Oral presentation I-4 14:50-15:05 Coherent control of atomic inner-shell x-ray lasing via perturbed valence-shell transitions Jianpeng Liu , National University of Defense Technology, China
Oral presentation I-5 15:20-15:35 Efficient generation of high-harmonic optical vortices using cylindrical waveguides and hollow-cone targets Ke Hu , Shanghai Jiao Tong University, China
Oral presentation I-6 15:05-15:20 Micro-modulation of optical signals by optical waveguide structures on lithium niobate thin films Yujie Ma , Shenzhen Technology University, China
Oral presentation I-7 15:35-15:50 Ultrafast optical imaging for the observation of highly dynamic phenomena Cheng Lei , Wuhan University, China
Fundamental Physics at Extreme Light Particle Acceleration-I Parallel Session II 2023/6/6

Invited presentation II-1 14:00-14:25 A path for optimizing direct laser acceleration Róbert Babjak , Instituto Superior Tecnico; Lisbon, Portugal
Young Scientist Award invited Presentation II-2 14:25-14:50 Femtosecond electron microscopy of the laser-plasma wakefield dynamics Yang Wan (万阳) , Weizmann Institute of Science, Israel
Oral presentation II-3 14:50-15:05 Steady regime of radiation pressure acceleration with foil thickness adjustable within micrometers under 10-100 PW laser Meng Liu (刘梦) , Institute of Physics, Chinese Academy of Sciences, China
Oral presentation II-4 15:05-15:20 Transverse instabilities induced periodic modulation in laser driven proton beams Jianhui Bin (宾建辉) , Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China
Oral presentation II-5 15:20-15:35 Synchronous post-acceleration of laser-driven protons in helical coil targets by controlling the current dispersion Zhipeng Liu , Peking University, China
Oral presentation II-6 15:35-15:50 Mechanism Studies for the Relativistic Attosecond Electron Bunches from Laser-Illuminated Nano-Targets Fang Tan (谭放) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Inertial Confinement Fusion Physics Holraum and laser-plasma interaction-I Parallel Session III 2023/6/6
Invited presentation III-1 14:00-14:20 Researches on Laser Driven Particle Acceleration, Neutron Source, and Their Applications at ILE Osaka University Kunioki Mima , Institute of Laser Engineering, Osaka University, Japan
Invited presentation III-2 14:20-14:40 Time-dependent hohlraum radiation drive from the localized reemitted flux of gold spheres Yaoyuan Liu (刘耀远) , Laser Fusion Research Center, China Academy of Engineering Physics, China

Invited presentation III-3 14:40-15:00 Modeling the interaction of a 1023 W/cm² laser pulse with a micro-cone target Olimpia Budriga , I.N.F.L.P.R., Romania
Oral presentation III-4 15:00-15:15 Coulomb logarithm for temperature relaxation in hot DT plasmas by binary collision Bin He (何斌) , Institute of Applied Physics and Computational Mathematics, China
Oral presentation III-5 15:15-15:30 Preliminary observation of stimulated Raman side-scattering dependence on laser intensity in Direct-Drive experiments Kevin Glize , Shanghai Jiao Tong University, China
Oral presentation III-6 15:30-15:45 Thermal smoothing effect in indirect-direct hybrid-drive ICF Minqing He (何民卿) , Institute of Applied Physics and Computational Mathematics, China
Radiation and Hydrodynamics High energy density science and warm dense matter-I Parallel Session IV 2023/6/6
Keynote presentation IV-1 14:00-14:30 Wave and turbulent magnetic field measurements in laser-produced plasmas with ion radiography using solid-state nuclear track detectors and informatics Yasuhiro Kuramitsu , Osaka University, Japan
Invited presentation IV-2 14:30-14:50 Laboratory study of the magnetic field compression in nanosecond laser produced plasma Andrey Sladkov , LightStreamLabs LLC
Oral presentation IV-3 14:50-15:05 Non-equilibrium energy transfer in laser-excited solids and warm dense matter Jia Zhang , Helmholtz-Zentrum Dresden-Rossendorf, Germany
Oral presentation IV-4 15:05-15:20 Extreme focusing of high-power X-ray laser based on solid-density plasma Peng Chen (陈鹏) , Shenzhen Technology University, China

<p>Oral presentation IV-5 15:20-15:35</p> <p>Interactions of Laser-induced Plasma Jet with Neutral Gas</p> <p>Duo Zhao (赵多), Institute of Applied Physics and Computational Mathematics, China</p>
<p>Oral presentation IV-6 15:35-15:50</p> <p>Experimental Study of Radiative Shock on the 100kJ Laser Facility</p> <p>Tianming Song (宋天明), Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>High Pressure Physics and Materials Science Dynamic behavior of materials under compression-I</p> <p>Parallel Session V 2023/6/6</p>
<p>Keynote presentation V-1 14:00-14:30</p> <p>Research on the phase evolution of debris clouds</p> <p>Xiaowei Chen (陈小伟), Beijing Institute of Technology, China</p>
<p>Invited presentation V-2 14:30-14:50</p> <p>Adiabatic Sound Speed of Shock-Compressed Liquid Deuterium up to 800 GPa</p> <p>Xiaoxi Duan (段晓溪), Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>Invited oral presentation V-3 14:50-15:05</p> <p>Explosive Implosion Magnetic Flux Generator and its Application in High Pressure Physics</p> <p>Zhuowei GU (谷卓伟), Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>Oral presentation V-4 15:05-15:20</p> <p>Stabilization Of the Rayleigh-Taylor Instability in Laser-Driven Quasi-Isentropic Compression Experiments</p> <p>Chuansheng Yin (尹传盛), Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>Oral presentation V-5 15:20-15:35</p> <p>Simulation of XFEL experiments</p> <p>Xiaoya Li (李晓亚), Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>Oral presentation V-6 15:35-15:50</p> <p>The deformation and damage mechanism of different kinds of high-entropy alloy with various microstructures under shock compression</p> <p>Ningbo Zhang (张宁泊), Southwest Jiaotong University, China</p>

Fundamental Physics at Extreme Light Fundamental Physics-II
Parallel Session VI 2023/6/6

Invited presentation VI-1 16:10-16:35

Probing multi-scale spatio-temporal electron transport of relativistic laser-plasma interactions at European XFEL
Lingen Huang (黄林根), Helmholtz-Zentrum Dresden-Rossendorf, Germany

Invited oral presentation VI-2 16:35-16:55

Branched flows in high-energy-density physics
Ke Jiang (蒋轲), Shenzhen Technology University, China

Invited oral presentation VI-3 16:55-17:15

Systematic study of laser-assisted proton radioactivity and α decay from deformed nuclei
Jun-Hao Cheng (程俊皓), National University of Defense Technology, China

Oral presentation VI-4 17:15-17:30

Waves in plasma and high-energy laser ion acceleration, an interesting theoretical perspective
Bin Liu (刘彬), Guangdong Institute of Laser Plasma Accelerator Technology, Guangzhou, China, China

Oral presentation VI-5 17:30-17:45

Dynamic compression driven by surface return current in relativistic laser cryogenic hydrogen jets interactions
Long Yang, Helmholtz-Zentrum Dresden-Rossendorf; Technische Universität Dresden, Germany

Oral presentation VI-6 17:45-18:00

Spectrum Tailored Random Fiber Laser towards High Power Laser Facility
Mengqiu Fan (范孟秋), Laser Fusion Research Center, China Academy of Engineering Physics, China

Fundamental Physics at Extreme Light Particle Acceleration-II
Parallel Session VII 2023/6/6

Invited presentation VII-1 16:10-16:35

Advanced Wakefield Experiment (AWAKE) at CERN: current status and future plan
Guoxing Xia (夏国兴), University of Manchester, UK

Young Scientist Award invited presentation VII-2 16:35-17:00 (withdrawn) Generation and acceleration of dense positron beams by irradiation of a thin microtape with ultraintense lasers Xiaofei Shen , Max Planck Institute for Nuclear Physics, Germany
Invited oral presentation VII-3 17:00-17:15 Collimated particle acceleration driven by intense vortex laser Wenpeng Wang (王文鹏) , Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China
Invited oral presentation VII-4 17:15-17:30 Studies of laser wakefield accelerators at IHEP Ming Zeng (曾明) , Institute of High Energy Physics, Chinese Academy of Sciences, China
Oral presentation VII-5 17:30-17:45 Generation of ultrabright polarized attosecond electron bunch via dual-wake injection Ting Sun , Xi'an Jiaotong University, China
Oral presentation VII-6 17:45-18:00 Pre-bunched electron beams generation in plasma accelerators Xinlu Xu (徐新路) , Peking University, China
Inertial Confinement Fusion Physics Holraum and laser-plasma interaction-II Parallel Session VIII 2023/6/6
Invited Presentation VIII-1 16:10-16:35 Generation of megatesla magnetic fields with micro-structured targets Masakatsu Murakami , Institute of Laser Engineering; Osaka University, Japan
Young Scientist Award invited presentation VIII-2 16:35-17:00 Dynamics of nanosecond laser pulse propagation and of associated instabilities in a magnetized underdense plasma Weipeng Yao (姚伟鹏) , CNRS;LULI, France
Oral presentation VIII-3 17:00-17:15 Suppression of sideward stimulated Raman scattering with broadband lasers Xiaofeng Li , Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China

Oral presentation VIII-4 17:15-17:30 Kinetic simulation of sideband instability and its effects on hot electron generation by stimulated Raman side-scattering Qing Wang , Institute of Applied Physics and Computational Mathematics, China
Oral presentation VIII-5 17:30-17:45 Generating axial magnetic fields via two plasmon decay driven by a twisted laser Yu Ji (季雨) , University of Science and Technology of China, China
Oral presentation VIII-6 17:45-18:00 Experimental evidence of coronal plasma expansion inhibition with uranium-based hohlraum wall Hang Zhao (赵航) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Radiation and Hydrodynamics High energy density science and warm dense matter-II Parallel Session IX 2023/6/6
Invited presentation IX-1 16:10-16:30 HED science with intense heavy-ion pulses at GSI/FAIR Paul Neumayer , GSI Darmstadt, Germany
Invited presentation IX-2 16:30-16:50 Bright laser-driven Betatron radiation and dynamic imaging application Shaoyi Wang (王少义) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Invited presentation IX-3 16:50-17:10 γ-photon flash from high-intensity laser and solid target interaction Tae-Moon Jeong , The Extreme Light Infrastructure, ELI Beamlines Facility, Czech Republic, Czech Republic
Oral presentation IX-4 17:10-17:25 Experimental development of turbulent mixing on Shenguang laser facilities Yongteng Yuan (袁永腾) , Laser Fusion Research Center, China Academy of Engineering Physics, China

<p>Oral presentation IX-5 17:25-17:40</p> <p>Accurate path-integral molecular dynamics calculation of aluminum with improved empirical ionic potentials</p> <p>Zixiang Yan, Beijing University of Posts and Telecommunications, China</p>
<p>Oral presentation IX-6 17:40-17:55</p> <p>Derivation and numerical resolution of multi-component, multi-ion-temperature plasma flow models</p> <p>Chao Zhang, Institute of Applied Physics and Computational Mathematics, China</p>
<p>High Pressure Physics and Materials Science Dynamic behavior of materials under compression-II</p> <p>Parallel Session X 2023/6/6</p>
<p>Invited presentation X-1 16:10-16:30</p> <p>Study on the Equation of State and Sound Velocity of Warm Dense Matter Produced by Extreme Shock Compression of Gases and Solids</p> <p>Zhi-Guo Li (李志国), Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>Invited presentation X-2 16:30-16:50</p> <p>Studies of the structure and x-ray Thomson scattering of warm dense matter</p> <p>Yong Hou (侯永), National University of Defense Technology, China</p>
<p>Invited oral presentation X-3 16:50-17:05</p> <p>Physical Properties and Phase Transition of Low Z Materials under Dynamic High Pressure</p> <p>Zhiyu He, Shanghai Institute of Laser Plasma, China</p>
<p>Oral presentation X-4 17:05-17:20</p> <p>Peculiarity of diamond melting on the Hugoniot</p> <p>Liang Sun (孙亮), Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>Oral presentation X-5 17:20-17:35</p> <p>Crystal Structure and Melting Curve of Tantalum under High Pressure</p> <p>Hao Liu, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>

Oral presentation X-6 17:35-17:50

Dislocation structure and lattice dynamic in shock-compressed single crystal Aluminum

Mengyang Zhou, Institute of Fluid Physics, China Academy of Engineering Physics, China

Oral presentation X-7 17:50-18:05

Nanoscale imaging of the bulk polycrystalline material under compression with XFEL

Meng Lv (吕蒙), Sichuan University, China

Parallel sessions

2023/6/7 14:00-16:00 Wednesday

<b style="color: red;">Fundamental Physics at Extreme Light Radiation source <b style="color: red;">Parallel Session XI 2023/6/7
Invited presentation XI-1 14:00-14:25 Ultrafast X-ray sources driven by femtosecond lasers at ELI Beamlines facility Uddhab Chaulagain , ELI Beamlines, Czech Republic
Invited presentation XI-2 14:25-14:50 Nonlinear Compton Scattering and bright narrow-band gamma-sources Sergey Rykovanov , Skolkovo Institute of Science and Technology
Invited presentation XI-3 14:50-15:15 Towards circularly polarized and vortex harmonic radiation from relativistic laser plasma Jingwei Wang (王精伟) , Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China
Invited presentation XI-4 15:15-15:40 Brilliant femtosecond-laser-driven hard X-ray flashes from carbon nanotube plasma Wenjun Ma (马文君) , Peking University, China
Oral presentation XI-6 15:40-15:55 Attosecond pulses based on the high-order harmonics generated from laser-plasma interaction Xinrong Xu , National University of Defense Technology, China
<b style="color: red;">Inertial Confinement Fusion Physics Implosion and instabilities <b style="color: red;">Parallel Session XII 2023/6/7
Invited presentation XII-1 14:00-14:25 Ion-electron non-equilibrium in ICF hot-spot ignition Zhengfeng Fan (范征锋) , Institute of Applied Physics and Computational Mathematics, China
Invited presentation XII-2 14:25-14:50 Simulation and assessment of material mixing in an indirect-drive implosion with a hybrid fluid-PIC code Hongbo Cai (蔡洪波) , Institute of Applied Physics and Computational Mathematics, China

Oral presentation XII-3 14:50-15:05 Numerical investigation of Richtmyer-Meshkov instability in the reshock process based on discrete Boltzmann method Chuangdong Lin (林传栋) , Sun Yat-sen University, China
Oral presentation XII-4 15:05-15:20 The nonlocal electron heat transport under the non-Maxwellian distribution in laser plasmas and its influence on laser ablation Kai Li (李凯) , Institute of Applied Physics and Computational Mathematics, China
Oral presentation XII-5 15:20-15:35 Observation of a non-equilibrium effect in an indirectly driven implosion Gang Xiong (熊刚) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Oral presentation XII-6 15:35-15:50 Plasma kinetics: Discrete Boltzmann modelling and Richtmyer-Meshkov instability Jiahui Song , Institute of Applied Physics and Computational Mathematics, China
Radiation and Hydrodynamics Hydrodynamic instability Parallel Session XIII 2023/6/7
Invited presentation XIII-1 14:00-14:25 Radiation transport through inhomogeneous mixtures Cong-Zhang Gao (高聪章) , Institute of Applied Physics and Computational Mathematics, China
Invited presentation XIII-2 14:25-14:50 Mitigation of shock-driven interfacial instability Takayoshi Sano , Osaka University, Japan
Oral presentation XIII-3 14:50-15:05 The influence of initial inclined interface on compressible Rayleigh-Taylor instability by the discrete Boltzmann method Huilin Lai (赖惠林) , Fujian Normal University, China
Oral presentation XIII-4 15:05-15:20 A three-dimensional physical configuration model for the rapid transition to turbulent flows in Richtmyer-Meshkov instability with reshock Zheng Yan , Institute of Applied Physics and Computational Mathematics, China

Oral presentation XIII-5 15:20-15:35 Role of hot electrons in mitigating ablative Rayleigh-Taylor instability Jun Li (李俊) , Institute of Applied Physics and Computational Mathematics, China
Oral presentation XIII-6 15:35-15:50 Effects of electron heating and surface rippling on Rayleigh-Taylor instability in radiation pressure acceleration Xuezhi Wu , Peking University, China
High Pressure Physics and Materials Science Functional materials and physics Parallel Session XIV 2023/6/7
Keynote presentation XIV-1 14:00-14:30 Functional and superhard super-borides Xiaohui Yu (于晓辉) , Institute of Physics, Chinese Academy of Sciences, China
Invited presentation XIV-2 14:30-14:50 Pressure-modulated structure-function units in optoelectronic metal halides Xujie Lv (吕旭杰) , Center for High Pressure Science & Technology Advanced Research, China
Invited presentation XIV-3 14:50-15:10 Crystal structure prediction method MAGUS and its applications Jian Sun (孙建) , Nanjing University, China
Invited presentation XIV-4 15:10-15:30 Magnetic detection under high pressures using designed silicon vacancy centres in silicon carbide Xiaodi Liu (刘晓迪) , Hefei Institute of Materials Science, Chinese Academy of Sciences, China
Oral presentation XIV-5 15:30-15:45 Exploration of novel materials under pressure Guoying Gao (高国英) , Yanshan University, China
High Pressure Physics and Materials Science Transitions Parallel Session XV 2023/6/7
Keynote presentation XV-1 14:00-14:30 A new computational method to apply pressure to molecular systems and its applications to high-pressure organic reactions Bo Chen , Donostia International Physics Center, Spain

Invited oral presentation XV-2 14:30-14:50 Folded network and structural transition in molten tin Liang Xu (徐亮) , Institute of Fluid Physics, China Academy of Engineering Physics, China
Oral presentation XV-3 14:50-15:05 New phases of hydrates at High Pressure Xiao Dong (董校) , Nankai University, China
Oral presentation XV-4 15:05-15:20 On the high-pressure phase of cold compressed bulk graphite and graphene nanoplatelets Elissaios Stavrou , Guangdong Technion Israel Institute of Technology, China
Oral presentation XV-5 15:20-15:35 Deformation behavior and phase transition mechanisms of typical ceramics under high pressure Binbin Yue , Center for High Pressure Science & Technology Advanced Research, China
Oral presentation XV-6 15:35-15:50 High-pressure phase stability of the high-entropy alloy AlCrFeCoNi by DFT calculations Hengzhong Zhang , Center for High Pressure Science & Technology Advanced Research, China

Parallel sessions

2023/6/8 14:00-18:00 Thursday

Fundamental Physics at Extreme Light QED effect and nuclear physics-I Parallel Session XVI 2023/6/8
<p>Invited presentation XVI-1 14:00-14:25</p> <p>What can we learn from experiments with high-brilliance γ-ray beams</p> <p>Dimiter Balabanski, Extreme Light Infrastructure - Nuclear Physics; National Institute for R&D in Physics and Nuclear Engineering, Romania</p>
<p>Invited presentation XVI-2 14:25-14:50</p> <p>Simulations of spin-polarized ion beams from laser-plasma interaction</p> <p>Lars Reichwein, Heinrich-Heine-Universität Düsseldorf, Germany</p>
<p>Oral presentation XVI-3 14:50-15:05</p> <p>Laser production of nuclear isomer Mo-93m and its astrophysical implication on Mo-92 production</p> <p>Wen Luo (罗文), University Of South China, China</p>
<p>Oral presentation XVI-4 15:05-15:20</p> <p>Vortex γ photon generation via spin-to-orbital angular momentum transfer in nonlinear Compton scattering</p> <p>Mamutjan Ababekri, Xi'an Jiaotong University, China</p>
<p>Oral presentation XVI-5 15:20-15:35</p> <p>Electronic excitation processes of the ^{229}Th isomer in laser-generated plasmas</p> <p>Hanxu Zhang, Graduate School of China Academy of Engineering Physics, China</p>
<p>Oral presentation XVI-6 15:35-15:50</p> <p>Enhanced neutron generation with multi-channel target irradiated by relativistic femtosecond laser</p> <p>Yanlei Yang (杨衍磊), China Institute of Atomic Energy, China</p>
Inertial Confinement Fusion Physics Drivers, targets and diagnostics-I Parallel Session XVII 2023/6/8

Invited presentation XVII-1 14:00-14:25 The kilo-Joule, nanosecond high repetition-rate facility at the Extreme Light Infrastructure ERIC (Beamlines) for IFE studies Stefan Weber , ELI-Beamlines; Academy of Sciences of the CR, Czech Republic
Invited presentation XVII-2 14:25-14:50 Ultra-high Efficiency Bremsstrahlung Production in Interaction of Direct Laser Accelerated Electrons with High-Z Material Parysatis Tavana , Friedrich Schiller University Jena, Germany
Oral presentation XVII-3 14:50-15:05 Diagnosis of indirectly driven double shell targets with point-projection hard x-ray radiography Chao Tian (田超) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Oral presentation XVII-4 15:05-15:20 Improving thermal uniformity of the capsule in a cylindrical cryogenic target Hong Yang (杨洪) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Oral presentation XVII-5 15:20-15:35 Multi-channel Time-of-Flight Neutron Detection for Double Cone Ignition Xiao Su (苏斌) , Shanghai Jiao Tong University, China
Oral presentation XVII-6 15:35-15:50 Development of high energy monochromatic spherical bent crystal imaging in implosion and hydrodynamic instability Zhenghua Yang , Laser Fusion Research Center, China Academy of Engineering Physics, China
Inertial Confinement Fusion Physics Alternative ICF and pulsed power technology-I Parallel Session XVIII 2023/6/8
Keynote presentation XVIII-1 14:00-14:30 (withdrawn) Intense Hadron Beams for Research into Matter at Extremes Boris Sharkov , Joint Institute of Nuclear Research (JINR) Dubna, Russia
Oral presentation XVIII-2 14:30-14:45 Design for the vacuum insulator stack of 50MA facility Feng Li (李逢) , Institute of Fluid Physics, China Academy of Engineering Physics, China

Oral presentation XVIII-3 14:45-15:00 On the design of magnetically insulated transmission line for China next generation pulsed power machine Guo Fan (郭帆) , Institute of Fluid Physics, China Academy of Engineering Physics, China
Oral presentation XVIII-4 15:00-15:15 A Special Poloidal Confinement Electric Field Induced by Strong Converging Shock and its Effects on Converging Process Xinhao Liu , University of Science and Technology of China, China
Oral presentation XVIII-5 15:15-15:30 Experimental study on the hohlraum energetics in view-factor “I”-raum Li Qi , Laser Fusion Research Center, China Academy of Engineering Physics, China
Oral presentation XVIII-6 15:30-15:45 Transport of laser-accelerated fast-electron beams in solid-density matters guided by laser-driven pulsed magnetic fields Yihang Zhang , Institute of Physics, Chinese Academy of Sciences, China
High Pressure Physics and Materials Science Hydrogen and high-energy density material-I Parallel Session XIX 2023/6/8
Young Scientist Award invited presentation XIX-1 14:00-14:25 Mapping Extremal Stresses of Diamond from First Principles Chang Liu (刘畅) , Jilin University, China, China
Invited presentation XIX-2 14:25-14:50 Colossal NQE in Metallic Hydrogen: Unexpected Prediction from FTDP and AI-PIMD Hua-Yun Geng , Institute of Fluid Physics, China Academy of Engineering Physics, China
Oral presentation XIX-3 14:50-15:05 Non-hydrostatic pressure induced superconductivity in diamond and solid molecular hydrogen Quan Li , Jilin University, China
Oral presentation XIX-4 15:05-15:20 Synthesis, X-ray Diffraction and Nuclear Magnetic Resonance studies of Cesium and Rubidium polyhydrides Dmitrii Semenok , Center for High Pressure Science & Technology Advanced Research, China

Oral presentation XIX-5 15:20-15:35 High superconductivity in ternary hydrides under high pressure Hanyu Liu (刘寒雨) , Jilin University, China
Oral presentation XIX-6 15:35-15:50 Syntheses and characterizations of high-Tc polyhydrides under high pressures Guangtao Liu , Jilin University, China
High Pressure Physics and Materials Science High-pressure geoscience-I Parallel Session XX 2023/6/8
Keynote presentation XX-1 14:00-14:30 Simon Redfern , Nanyang Technological University, Singapore
Invited presentation XX-2 14:30-14:50 Mercury's mantle as constrained by its crust Olivier Namur , KU Leuven, Belgium
Invited presentation XX-3 14:50-15:10 Grain growth kinetics of bridgmanite and lower mantle rheology Hongzhan Fei (费宏展) , Zhejiang University, China
Invited presentation XX-4 15:10-15:30 Distinct compressional behaviors between silicate melts and glasses at high pressures Zhicheng Jing , Southern University of Science and Technology, China
Invited presentation XX-5 15:30-15:50 Ni and Co metal/silicate partitioning: tracing pressure and oxygen fugacity conditions of planetary differentiation Camille Cartier , CRPG - CNRS - University of Lorraine, France
Fundamental Physics at Extreme Light QED effect and nuclear physics-II Parallel Session XXI 2023/6/8
Invited presentation XXI-1 16:10-16:35 Gamma Factory Mieczyslaw Krasny , Sorbonne University Paris and CERN Geneva, France
Invited presentation XXI-2 16:35-17:00 Isomeric excitation of ²²⁹Th in laser-heated clusters Xu Wang , Graduate School of China Academy of Engineering Physics, China

Oral presentation XXI-3 17:00-17:15 Quantum Mechanisms of Electron and Positron Acceleration Bo Zhang , Laser Fusion Research Center, China Academy of Engineering Physics, China
Oral presentation XXI-4 17:15-17:30 Dense polarized positrons generated by laser-plasma interactions Huai-Hang Song , Renmin University of China; Institute of physics, Chinese Academy of Sciences, China
Oral presentation XXI-5 17:30-17:45 Experimental studies on the electron acceleration and positron generation in the interaction of Petawatt femtosecond lasers with gas targets Zhimeng Zhang (张智猛) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Oral presentation XXI-6 17:45-18:00 Measurements of Ultra-Short Lifetime Isomers from Photonuclear Reactions using Laser-Driven Ultra-Intense γ-Ray Di Wu , Peking University, China
Inertial Confinement Fusion Physics Drivers, targets and diagnostics-II Parallel Session XXII 2023/6/8
Keynote presentation XXII-1 16:10-16:40 Recent progress of experimental studies on fast- ignition inertial fusion energy Shinsuke Fujioka , Osaka University, Japan
Invited presentation XXII-2 16:40-17:00 High energy particles and photons in relativistic laser-matter interaction Nikolay Andreev , Joint Institute for High Temperatures of the Russian Academy of Sciences, Russia
Oral presentation XXII-3 17:00-17:15 Coherent subcycle optical shock from superluminal plasma wake Hao Peng (彭浩) , Shenzhen Technology University, China
Oral presentation XXII-4 17:15-17:30 Development and application of dual MCP gated image intensifier for high energy X-ray online imaging process Feng Zhang (张锋) , Laser Fusion Research Center, China Academy of Engineering Physics, China

Oral presentation XXII-5 17:30-17:45 The study of transmission energy on Hundreds-of-joules Broadband Kunwu Laser Facility Peipei Wang , Shanghai Institute of Laser Plasma, China
Oral presentation XXII-6 17:45-18:00 First-Principles Studies on X-Ray Thomson Scattering from Warm Dense Matter Chongjie Mo , Beijing Computational Science Research Center, China
Oral presentation XXII-7 18:00-18:15 Study on a novel technique of record and online reading of the X-ray image Kuan Ren (任宽) , Laser Fusion Research Center, China Academy of Engineering Physics, China
Inertial Confinement Fusion Physics Alternative ICF and pulsed power technology-II Parallel Session XXIII 2023/6/8
Invited presentation XXIII-1 16:10-16:35 Dynamical process in the stagnation stage of the double-cone ignition scheme Ke Fang , Institute of Physics, Chinese Academy of Sciences, China
Oral presentation XXIII-2 16:35-16:50 Efficient designing laser profiles and target structures for laser-driven fusion Xiaohu Yang , National University of Defense Technology, China
Oral presentation XXIII-3 16:50-17:05 Recent astrophysical research driven by radial foil Z-pinch on 10MA facility Qiang Xu (徐强) , Institute of Fluid Physics, China Academy of Engineering Physics, China
Oral presentation XXIII-4 17:05-17:20 Machine learning assisted pulse shaping for double cone ignition implosions Tao Tao , University of Science and Technology of China, China
Oral presentation XXIII-5 17:20-17:35 Vacuum Surface Flashover Experiments under Triple-pulses for High Power Facilities Xu Deng (邓旭) , Tsinghua University, China

Oral presentation XXIII-6 17:35-17:50 Experimental study of a preconditioned Z pinch with dynamic axial magnetic field generated by helical return current posts Zhiyuan Jiang , Xi'an Jiaotong University, China
High Pressure Physics and Materials Science Hydrogen and high-energy density material-II Parallel Session XXIV 2023/6/8
Young Scientist Award invited presentation XXIV-1 16:10-16:30 Distinct Vibrational Signatures and Complex Phase Behavior in Metallic Oxygen Philip Dalladay-simpson , Center for High Pressure Science & Technology Advanced Research, China, China
Invited presentation XXIV-2 16:30-16:50 Superconductivity in high pressure hydrides Bartomeu Monserrat , University of Cambridge, UK
Invited presentation XXIV-3 16:50-17:10 Pressure synthesis of the long-sought-after superhard and recoverable C₃N₄ and CN₂ compounds Dominique Laniel , University of Edinburgh, UK
Oral presentation XXIV-4 17:10-17:25 Superconducting Li₈Au electride at high pressure Xiaohua Zhang (张孝华) , Yanshan University, China
Oral presentation XXIV-5 17:25-17:40 Superconductivity in van der Waals metal sulfides under high pressure Fang Hong (洪芳) , Institute of Physics, Chinese Academy of Sciences, China
Oral presentation XXIV-6 17:40-17:55 Hydride Superconductors Under High Pressure Xiaoli Huang , Jilin University, China
High Pressure Physics and Materials Science High-pressure geoscience-II Parallel Session XXV 2023/6/8
Invited presentation XXV-1 16:10-16:30 Melting relations in the system MgO-SiO₂ at extreme conditions Toshimori Sekine , Center for High Pressure Science & Technology Advanced Research, China

Invited presentation XXV-2 16:30-16:50 Multigrain crystallography at megabar Li Zhang (张莉) , Center for High Pressure Science & Technology Advanced Research, China
Invited presentation XXV-3 16:50-17:10 Silica-water superstructure and one-dimensional superionic conduit in Earth's mantle Shengcai Zhu , Sun Yat-sen University, China
Oral presentation XXV-4 17:10-17:25 New Frontiers in nuclear magnetic resonance for high-pressure research and Geo-science Thomas Meier , Center for High Pressure Science & Technology Advanced Research, China
Oral presentation XXV-5 17:25-17:40 Thermal Conductivity of MgSiO₃ under Lower Mantle Conditions Calculated by Machine Learning Potential Xiaoxiang Yu , National University of Defense Technology, China
Oral presentation XXV-6 17:40-17:55 Prediction of potassium silicate hosts in Earth's deep mantle Shidong Yu , Nanyang Technological University, Singapore

Best Poster Award and Poster sessions

2023/6/7 16:00-18:00 Wednesday

Best Poster Award session

Fundamental Physics at Extreme Light	
BPA-1	Experimental investigation of the tunable magnetically insulated transmission line oscillator Xiaoyu Wang (王晓玉) , Space Engineering University, China
BPA-2	Multi-photon double ionization of helium by ultrashort XUV pulses: probing the role of electron correlations Wei-Chao Jiang , Shenzhen University, China
BPA-3	A multiscale computational scheme for interactions between ultrafast intense laser pulses and condensed medium within the full electronic potential framework Jun Tang , Institute of Materials, China Academy of Engineering Physics, China
BPA-4	Generation of dense and highly polarized positrons by an ultrastrong laser irradiating a solid foil Kun Xue , Xi'an Jiaotong University, China
BPA-5	Constants of motion of a charged particle in intense complex electromagnetic fields Wei Liu (刘伟) , University of Science and Technology of China, China
BPA-6	High energy density $e^+e^-\gamma$-photon plasma generation by laser-electron beam collisions Yan-Ting Hu , National University of Defense Technology, China
BPA-7	High energy collimated proton beams from intense circularly-polarized laser interaction with micro-pillar targets Shuai Li , Shenzhen Technology University, China

BPA-8 A composite ansatz to reconcile dynamical structure factor of valence electrons Yupei Zhang , Peking University, China
BPA-9 The issues of wide-bandwidth high-power laser based on discrete multi-color combination Ke Yao (姚轲) , Laser Fusion Research Center, China Academy of Engineering Physics, China
BPA-10 High power laser facility demonstrates the capability of four wavelength output for CBET experiments Dandan Zhou (周丹丹) , Laser Fusion Research Center, China Academy of Engineering Physics, China
BPA-11 Source-coded radiography technique with high spatial-resolution for x-ray source driven by ps-laser Tiankui Zhang , Laser Fusion Research Center, China Academy of Engineering Physics, China
Inertial Confinement Fusion Physics
BPA-12 Photoelectric effects of Metal Halide Perovskite and Applications for X-ray photocathode Yukun Li (黎宇坤) , Laser Fusion Research Center, China Academy of Engineering Physics, China
BPA-13 Simulation of Spatial Resolution and Detection Efficiency of Lens-coupled Scintillator for Intense Pulsed Gamma-Ray Imaging System Using Geant4 Guoguang Li , Tsinghua University, China
BPA-14 Enhancing stimulated Brillouin scattering in multiple resonance regions by two-color light in inhomogeneous flowing plasmas. Zhuoming Huang (黄卓明) , Institute of Applied Physics and Computational Mathematics, China

BPA-15 Neutral Network-Based Hole-Boring Radiation Pressure Ion Acceleration Modeling Pudu Zhang (张普渡) , National University of Defense Technology, China
BPA-16 Large-incidence-angle multi-beam two-plasmon decay instability in inertial confinement fusion Fuxi Zhou , University of Science and Technology of China, China
BPA-17 Impact of superthermal electrons on driven ion acoustic wave fluid nonlinearities Zhijian Guo , Shenzhen Technology University, China
BPA-18 Production of 10s nc attosecond electron bunch with an adjustable duration via interaction of relativistic vortex laser and underdense plasma Wen-Yu Zhang (张文昱) , National University of Defense Technology, China
BPA-19 Optimize laser configuration mitigating CBET in a direct-drive ICF regime using a ray-based code PHANTAM Chang-Wang Lian , University of Science and Technology of China, China
BPA-20 A conservative MHD scheme on Lagrangian grids for MagLIF hydrodynamic simulations Shijia Chen , Shenzhen Technology University, China
BPA-21 Suppressing stimulated Raman side-scattering by vector beams Xiaobao Jia , University of Science and Technology of China, China
BPA-22 An ultrafast two-dimensional x-ray imager with temporal fiducial for laser-produced plasmas Zhengdong Liu , Beijing Normal University, China
BPA-23 Experimental Characterization of Nanosecond-laser-drive Collisionless Electrostatic Shocks Zongqiang Yuan (袁宗强) , Laser Fusion Research Center, China Academy of Engineering Physics, China

BPA-24 Study of Fast Electron Transport in Double-Cone Ignition Experiments Yufeng Dong (董玉峰) , Institute of Physics, Chinese Academy of Sciences, China
BPA-25 A Comprehensive Online Characterization System for Liquid Sheet Targets Ziyang Peng , Peking University, China
BPA-26 Beam and target alignment at the ICF laser device using a new grid target Xiaolu Zhang , China Academy of Engineering Physics, China
BPA-27 Angular distribution of deuteron-deuteron fusion protons from counter-streaming plasmas Jinglong Li (李璟隆) , Shanghai Jiao Tong University, China
BPA-28 Study on Automatic Alignment Technology of Diagnostic System Pin Yang (杨品) , Laser Fusion Research Center, China Academy of Engineering Physics, China
BPA-29 Demonstration of direct-drive spherical implosion via shaped laser pulse loading Shaojun Wang , Institute of Physics, Chinese Academy of Sciences, China
BPA-30 Optimization of target capsules under steady-state ablation condition based on the rocket model Guoqing Zeng (曾国庆) , University of Science and Technology of China, China
Radiation and Hydrodynamics
BPA-31 Linear Stability Analysis of the Radiation Effects on the Stratified Compressible Rayleigh-Taylor Instability Cunbo Zhang (张存波) , Institute of Applied Physics and Computational Mathematics, China
BPA-32 Richtmyer-Meshkov instability in high energy density physics Zebang Fu (付泽邦) , Graduate School of China Academy of Engineering Physics, China

BPA-33 Classical molecular dynamics simulation of isotope separation under shock wave loading Xinyu Zhang (张新宇), Peking University, China
BPA-34 Inversion of time-dependent radiation temperature on sample via shock wave breaking out time Liling Li, Laser Fusion Research Center, China Academy of Engineering Physics, China
BPA-35 Electric field enhancement breakdown induced by the pulse formation and transmission of parallel-plate Blumlein line Yi Shen, Institute of Fluid Physics, China Academy of Engineering Physics, China
BPA-36 Growth of the ablative Rayleigh-Taylor instability induced by time-variant heat flux fluctuations Yang Liu, University of Science and Technology of China, China
BPA-37 On finger collision of light fluid layers in reshocked Richtmyer-Meshkov flows Zhouyang Cong (丛洲洋), University of Science and Technology of China, China
BPA-38 Radiation hydrodynamics simulation of energy deposition in targets Lingrui Liao (廖棱锐), Peking University, China
BPA-39 Enhanced electron and radiation generation by micro-nano structured targets driven by petawatt laser pulses Yue Yang, Laser Fusion Research Center, China Academy of Engineering Physics, China
BPA-40 Photons and plasmons with orbital angular momentum in magnetized plasma Qi Huang, University of Science and Technology of China, China
BPA-41 Optical Thomson scattering system for wire array Z pinch experiment Wei Wang (王威), Xi'an Jiaotong University, China

High Pressure Physics and Materials Science	
BPA-42	The Graphite-Hexagonal Diamond Phase Transition Mechanism resolved by Molecular Dynamics Shengcai Zhu , Sun Yat-sen University, China
BPA-43	Metal Dynamic Behavior under Magnetically - Driven Ramp - wave Loading on Pulsed Power Facility Zhaohui Zhang , Institute of Fluid Physics, China Academy of Engineering Physics, China
BPA-44	Influence of the dislocation microstructures and load orientation on yielding behavior in tungsten under high strain rates Yang Xiang , Institute of Fluid Physics, China Academy of Engineering Physics, China
BPA-45	Combining stochastic density functional theory with deep potential molecular dynamics to study warm dense matter Tao Chen (陈涛) , Peking University, China
BPA-46	Stress-induced high-T_c superconductivity in solid molecular hydrogen Xianqi Song , Jilin University, China
BPA-47	Extended application of random-walk shielding-potential viscosity model of metals in wide temperature region Yuqing Cheng (程宇清) , University of Science and Technology Beijing, China
BPA-48	Shock waves and anisotropic deformation mechanisms in textured nanotwinned Cu Caihong Hou , Institute of Fluid Physics, China Academy of Engineering Physics, China
BPA-49	High-Pressure Elasticity Measurements of Aragonite: Implication for Low-Velocity Structure of Subducted Oceanic Crust in the Upper Mantle Luo Li (李络) , University of Science and Technology of China, China

BPA-50 Study on the causes of vacuoles in the ductile metal lamellar cracking process Yutong Yang (杨雨桐) , Peking University, China
BPA-51 Validating the ramp loading experiment scheme using molecular dynamics simulation Jingxiang Shen , Peking University, China
BPA-52 Melting deep Mercury's mantle constrained by high pressure-temperature experiments Yongjiang Xu , Center for High Pressure Science & Technology Advanced Research, China
BPA-53 Heterogeneous Diamond-cBN Composites with Superb Toughness and Hardness Baozhong Li (李宝忠) , Yanshan University, China
BPA-54 Development of X-ray fluorescence holography under high pressure Xinhui Zhan (战鑫慧) , Hiroshima University, Japan
BPA-55 Pressure-induced crystallization and metallization in amorphous As₂₀Se₈₀ Wenting Lu , Guangdong Technion Israel Institute of Technology, China
BPA-56 Morphology Tuned Pressure Induced Amorphization in VO₂(B) Nanobelts Benyuan Cheng , Center for High Pressure Science & Technology Advanced Research, China
BPA-57 Synthesis of Edge-shared Octahedral MAPbBr₃ via Pressure- and Temperature-induced Multiple-stage Processes Mei Li (李梅) , Center for High Pressure Science & Technology Advanced Research, China
BPA-58 The peculiarity of Boron Nitride Hugoniot by laser shock compression up to 1.6 TPa Huan Zhang , Laser Fusion Research Center, China Academy of Engineering Physics, China

<p>BPA-59</p> <p>Pressure induced electronic and structural transition in HfS₂</p> <p>Wei Zhong, Center for High Pressure Science & Technology Advanced Research, China</p>
<p>BPA-60</p> <p>PRESSURE-INDUCED SYNTHESIS AND PROPERTIES OF H₂S-H₂Se-H₂ MOLECULAR ALLOY</p> <p>Huixin Hu (胡蕙昕), Center for High Pressure Science & Technology Advanced Research, China</p>

Poster session

Fundamental Physics at Extreme Light
<p>P-1</p> <p>Novel materials for improving the laser induced damage threshold of fused silica</p> <p>Fangting Shi (匙芳廷), Southwest Jiaotong University, China</p>
<p>P-2</p> <p>Strong-field Effects on Time Delays in Correlated Ionization</p> <p>Wei-Chao Jiang, Shenzhen Univerisity, China</p>
<p>P-3</p> <p>Single shot gamma-induced positron spectroscopy based on laser wakefield accelerator</p> <p>Yonghong Yan (闫永宏), Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-4 (withdrawn)</p> <p>Signatures of two-photon Breit-Wheeler process in the polarized yy collider</p> <p>Qian Zhao, Xi'an Jiaotong University, China</p>
<p>P-5</p> <p>Short pulse neutron sources driven by relativistic femtosecond lasers</p> <p>Debin Zou (邹德滨), National University of Defense Technology, China</p>
<p>P-6</p> <p>Ultrafast Modulation of the Molten Metal Surface Tension under Femtosecond Laser Irradiation</p> <p>Yang Yang (杨洋), East China Normal University, China</p>

<p>P-7</p> <p>Research on the Generation of High Charge Electron Beams and High Brightness Radiation Sources Based on the Interaction between Picosecond Laser and Near Critical Density Plasma</p> <p>Mingzhe Yang (杨明哲), Xi'an Jiaotong University, China</p>
<p>P-8</p> <p>Experimental measurement of the velocity of Aluminum foils driven by the tense pulse soft X-ray radiation</p> <p>Siqun Zhang, Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-9</p> <p>Influence of a low-Z substrate on laser-driven microwire x-ray source</p> <p>Ling Li, Peking University, China</p>
<p>P-10</p> <p>Wavefront Synthesis of Far-field High-order Harmonics from Relativistic Plasma Mirror</p> <p>Chaoneng Wu, Shenzhen Technology University, China</p>
<p>P-11</p> <p>Study on inverse Compton scattering X-ray source generated by higher-order Bessel laser</p> <p>XiaoJuan Wang, Shenzhen Technology University, China</p>
<p>P-12</p> <p>Measurement of Spatiotemporal-coupling-aberration for a Single-shot Ultra-fast and Ultra-intense Laser Pulse</p> <p>Xiao Wang, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-13</p> <p>Anomalous diffraction of light at relativistic intensities</p> <p>Longqing Yi, Shanghai Jiao Tong University, China</p>
<p>P-14</p> <p>Vortices in multiphoton pair production revisited</p> <p>Lina Hu (胡丽娜), Beijing Normal University, China</p>
<p>P-15</p> <p>Simulation Study of a Bright Attosecond gamma-ray Source Generation by Irradiating an Intense Laser on a Cone Target</p> <p>Cuiwen Zhang (张翠文), Beijing Normal University, China</p>

<p>P-16</p> <p>Schwinger pair production rate and time for some space-dependent fields via worldline instantons formalism</p> <p>Orkash Amat, Beijing Normal University, China</p>
<p>Inertial Confinement Fusion Physics</p>
<p>P-17</p> <p>Liquid Scintillator Neutron Detection for Inertial Confinement Fusion</p> <p>Hongjie Liu, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-18</p> <p>Simulation of Large Scale FRC Formation, Translation, Merging and Magnetic Compression on MT Device</p> <p>Yuesong Jia (贾月松), Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-19</p> <p>Suppression of the stimulated Raman scattering in plasma by an ultra-wideband stochastic phase low-coherence laser</p> <p>Hongyu Zhou, National University of Defense Technology, China</p>
<p>P-20</p> <p>Three-dimensional iterative reconstruction of pulsed radiation sources using cylindrical harmonic decomposition and deep image prior post-processing</p> <p>Pengjian Gao (高建鹏), Tsinghua University, China</p>
<p>P-21</p> <p>Experiment of laser plasma instability under new ignition path</p> <p>Kaiqiang Pan, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-22</p> <p>Recent experimental progresses on energetics of octahedral spherical hohlraum</p> <p>Sanwei Li, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-23</p> <p>A fast and high-precision current assignment scheme applicable to cylindrical coordinates in PIC simulations</p> <p>Kaixuan Li, Institute of Applied Physics and Computational Mathematics, China</p>

<p>P-24</p> <p>Suppression of Stimulated Brillouin Scattering by Ion Acoustic Wave Seeding in a Two-Color Laser System</p> <p>Deji Liu, Institute of Applied Physics and Computational Mathematics, China</p>
<p>P-25</p> <p>Two-plasmon-decay instability in the non-eigenmode regime in laser plasma interaction</p> <p>Charles Frederick Wu (吴钟书), Shanghai Jiao Tong University, China</p>
<p>P-26</p> <p>Research progress of double shell target for volume ignition in China</p> <p>Hang Li, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-27</p> <p>Characteristic of Plasma Plume Generated by Laser Irradiated Target</p> <p>Dong Pan, Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-28</p> <p>Precise measurement of radiative albedo for high-Z hohlraum wall materials in inertial confinement fusion</p> <p>Zhiyu Zhang (张志宇), Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-29</p> <p>Machine learning on the ignition threshold for inertial confinement fusion</p> <p>Chen Yang, Hunan First Normal University, China</p>
<p>P-30</p> <p>Design of the next generation pulsed power machine in IFP</p> <p>Jihao Jiang, Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-31</p> <p>Improvement of the Specific Region Flux Diagnosis</p> <p>Lifei Hou, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-32</p> <p>Three-dimensional reconstruction of hot-spot self-emission</p> <p>Jianjun Dong (董建军), Laser Fusion Research Center, China Academy of Engineering Physics, China</p>

<p>P-33</p> <p>Backscatter spectra diagnostic implemented on a cluster platform of 100kJ laser facility</p> <p>Xiangming Liu, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-34</p> <p>High precise time division multiplex UV pulse waveform measurement system for high power laser facility</p> <p>Bo Zhang (张波), Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-35</p> <p>Electromagnetic emission via linear mode conversion mediated by stimulated Raman backscattering</p> <p>Xuyan Jiang (蒋旭艳), Shanghai Jiao Tong University, China</p>
<p>P-36</p> <p>Observations of Ionization Potential Depression in Warm Dense Matter with X-Ray Thomson Scattering</p> <p>Min Lv, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-37</p> <p>Improving symmetry tuning with I-raum in indirect-drive implosions</p> <p>Tian-Xuan Huang, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>Radiation and Hydrodynamics</p>
<p>P-38</p> <p>Observations of the convergent gas shock wave on the FP-1 pulsed power facility</p> <p>Qizhi Sun (孙奇志), Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-39</p> <p>Formation Mechanism of Laser-driven Scaled Magnetized “Pillars of Creation”</p> <p>Zhu Lei, Institute of Applied Physics and Computational Mathematics, China</p>
<p>P-40</p> <p>Research on X-ray edge-enhancement spiral zone plates coded imaging technique</p>

Quanping Fan , Laser Fusion Research Center, China Academy of Engineering Physics, China
P-41 The study of effective charge of low-energy H⁺ and He²⁺ ions in plasma Yu Lei (雷瑜) , Institute of Modern Physics, Chinese Academy of Sciences, China
P-42 Implementation of plane-wave-based stochastic-deterministic density functional theory for extended systems in ABACUS Qianrui Liu (刘千锐) , Peking University, China
P-43 Study of silver aerosol source term at different specific internal energy input from HE detonation devices Kefeng Song (宋科峰) , Institute of Fluid Physics, China Academy of Engineering Physics, China
P-44 Sensitive dependence of photoionization for highly charged H-like ion on the plasma environments Guopeng Zhao (赵国鹏) , Jiaxing university, China
P-45 Local wavelength evolution and Landau damping of electrostatic plasma wave driven by an ultra-relativistic electron beam in dense inhomogeneous plasma Ran Li , Shenzhen Technology University, China
P-46 Key Technologies of on-line Calibration based on Laser Plasma Pulsed Soft X-ray source Zuhua Yang , Laser Fusion Research Center, China Academy of Engineering Physics, China
P-47 High energy electron shadowgraphy diagnosing magnetic field Haoji Li (李豪卿) , Tsinghua University, China
P-48 The dynamics of shock wave-bubble interaction and the nonlinear evolution mechanism of subsequent ablative instability when multiple defects exist in the capsule Yunxing Liu (刘云星) , China University of Mining and Technology (Beijing), China

P-49 Theoretical model of radiation heat wave in two-dimensional cylinder with sleeve Cheng-Jian Xiao , Institute of Applied Physics and Computational Mathematics, China
P-50 VSHPIC: A highly efficient three-dimensional parallel particle-in-cell code based on vector spherical harmonics expansion Jianzhao Wang , Beijing Normal University, China
High Pressure Physics and Materials Science
P-51 Numerical simulation of magnetically driven sample experiment Mingxian KAN , Institute of Fluid Physics, China Academy of Engineering Physics, China
P-52 Dynamic response of Yttrium Aluminum Garnet polycrystalline and single-crystal transparent ceramics: experiments and mesoscopic simulations xiuxia Cao , Institute of Fluid Physics, China Academy of Engineering Physics, China
P-53 Numerical simulation of photoluminescence characteristics of NaCl (Cu) crystal Jun Yang (杨俊) , University Of South China, China
P-54 Nuclear magnetic resonance in lanthanum polyhydrides up to 1.5 Mbar Di Zhou (周迪) , Center for High Pressure Science & Technology Advanced Research, China
P-55 Planetary evolved magmatism constrained by partition coefficients between zircon and silicate melt Sheng Shang , Center for High Pressure Science & Technology Advanced Research, China
P-56 Triggering Dynamics of the Acetylene Topochemical Polymerization Xingyu Tang , Center for High Pressure Science & Technology Advanced Research, China

<p>P-57</p> <p>The Physical Origin of Shock Polarization</p> <p>Yuanjie Huang, Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-58</p> <p>High Power Nanosecond Laser for Dynamic Shock Compression</p> <p>Olivier Zabiolle, Amplitude Laser, China</p>
<p>P-59</p> <p>Improvement of accuracy of lattice parameter for single crystal XRD based on laser-induced x-ray</p> <p>Jin Liu, Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-60</p> <p>Experimental simulation and microstructural analysis of natural impact shocked reidite</p> <p>Hongsheng Yuan (苑洪胜), Center for High Pressure Science & Technology Advanced Research, China</p>
<p>P-61</p> <p>Probing the high-pressure structure of hydrogen-rich tantalum hydrides via CALYPSO</p> <p>Xue Li, Zhengzhou university, China</p>
<p>P-62</p> <p>Discrete element simulation of shock induced phase transition</p> <p>Chao Liu, Institute of Applied Physics and Computational Mathematics, China</p>
<p>P-63</p> <p>The magnetoresistance and Hall resistance in YSb under high pressure</p> <p>Qi Feng (冯琦), Center for High Pressure Science & Technology Advanced Research, China</p>
<p>P-64</p> <p>Transport properties of single-crystalline Cu_{0.02}TiSe₂</p> <p>Meilun Li (李美伦), Center for High Pressure Science & Technology Advanced Research, China</p>
<p>P-65</p> <p>Pressure-induced Structural Phase Transition in Kempite: A Candidate Material for Quantum Spin Liquid</p> <p>Xiaoyin Yang (杨晓莹), Jilin University, China</p>

<p>P-66</p> <p>Hugoniot measurement of iron under laser shock compression up to 8 TPa</p> <p>Weiming Yang, Laser Fusion Research Center, China Academy of Engineering Physics, China</p>
<p>P-67</p> <p>Pressure-induced isosymmetric phase transitions, ultrahigh ductility, and metallization in α-Ag₂S</p> <p>Azkar Saeed Ahmad, Guangdong Technion Israel Institute of Technology, China</p>
<p>P-68</p> <p>The deviation of the dynamic structure from the equilibrium phase diagram in shock-released bismuth due to metastable formation</p> <p>Jiangtao Li (李江涛), Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-69</p> <p>Diamond and novel materials synthesis by shock</p> <p>Yang Lu, Center for High Pressure Science & Technology Advanced Research, China</p>
<p>P-70</p> <p>Structure and properties of BiFeO₃ ferroelectric material under extreme high pressure conditions</p> <p>Zhangyang Zhou (周章洋), Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-71</p> <p>Fracture behaviors of long-term low-dose-rate neutron-irradiated Al-Mg-Si alloy</p> <p>Ling Hu, Institute of Fluid Physics, China Academy of Engineering Physics, China</p>
<p>P-72</p> <p>Bubble structure evolution and electron injection controlled by optical cycles in wakefields</p> <p>Song Liu (刘松), National University of Defense Technology, China</p>
<p>P-73</p> <p>Generation of high intensity x-rays by intense laser interaction with aerogel targets</p> <p>Ziqi Zhao (赵子琦), National University of Defense Technology, China</p>

P-74

Geochemical Process of Fluorine Incorporation into Calcite at Earth's Surface

Xin Li (李鑫), Nanyang Technological University, Singapore