

## A. Conference Schedule

|                        |             |  |   |  |   |
|------------------------|-------------|--|---|--|---|
| May<br>6 <sup>th</sup> | 8:30-18:00  | Satellite workshop on fluid interface instability at extreme |   |  |   |
|                        | 15:00-17:30 | Satellite workshop on laser and plasma instabilities         |   |  |   |
|                        | 14:00-20:00 | Registration   |   |  |   |
|                        | 18:00-20:00 | Welcome Reception  |   |  |   |
|                        | 19:00-21:00 | MRE Editorial Board Meeting                                  |   |  |   |
| May<br>7 <sup>th</sup> | 8:10-8:20   | Opening Ceremony   |   |  |   |
|                        | 8:20-12:00  | Plenary Talk   |   |  |   |
|                        | 14:00-18:10 | Fundamental physics at extremes<br>Oral Session I-1          | Pulsed power and application Oral Session<br>II-1 | Laser and particle beam fusion, magnetic driven fusion<br>Oral Session III-1 | Laser Plasma Interaction<br>Oral Session IV-1 |
|                        |             | Coffee Break   |   |  |   |
|                        |             | Fundamental physics at extremes<br>Oral Session I-2          | Pulsed power and application Oral Session<br>II-2 | Laser and particle beam fusion, magnetic driven fusion<br>Oral Session III-2 | Laser Plasma Interaction<br>Oral Session IV-2 |
| May<br>8 <sup>th</sup> | 8:00-12:00  | Plenary Talk   |   |  |   |
|                        | 14:00-18:10 | Fundamental physics at extremes<br>Oral Session I-3          | Pulsed power and application Oral Session<br>II-3 | Laser and particle beam fusion, magnetic driven fusion<br>Oral Session III-3 | Laser Plasma Interaction<br>Oral Session IV-3 |
|                        |             | Coffee Break   |   |  |   |

|                         |             |   |   |  |   |
|-------------------------|-------------|---|---|--|---|
|                         |             | Fundamental physics at extremes<br>Oral Session I-4           | Pulsed power and application Oral Session<br>II-4     | Laser and particle beam fusion, magnetic driven fusion<br>Oral Session III-4 | Laser Plasma Interaction<br>Oral Session IV-4 |
| May<br>9 <sup>th</sup>  | 8:00-12:00  | Plenary Talk  |   |  |   |
|                         | 14:00-17:45 | Fundamental physics at extremes<br>Oral Session I-5           | Discharge, laser and diagnostics Oral Session<br>II-5 | Laser and particle beam fusion, magnetic driven fusion<br>Oral Session III-5 | Laser Plasma Interaction<br>Oral Session IV-5 |
|                         |             | Coffee Break  |   |  |   |
|                         |             | Satellite workshop on advanced diagnostics technique for HEDP |   | Satellite workshop on laser fusion and science                               |   |
|                         | 19:00-21:00 | Poster Session  |   |  |   |
| May<br>10 <sup>th</sup> | 8:00-12:00  | Plenary Talk  |   |  |   |
|                         | 14:00-18:00 | Fundamental physics at extremes<br>Oral Session I-6           |   | Laser and particle beam fusion, magnetic driven fusion<br>Oral Session III-6 | Laser Plasma Interaction<br>Oral Session IV-6 |
|                         |             | Coffee Break  |   | Coffee Break   | Coffee Break                                  |
|                         |             | Fundamental physics at extremes<br>Oral Session I-7           |   | Laser and particle beam fusion, magnetic driven fusion<br>Oral Session III-7 | Laser Plasma Interaction<br>Oral Session IV-7 |
|                         | 18:30-20:30 | Closing Ceremony, Banquet                                     |   |  |   |
| May<br>11 <sup>th</sup> | 8:30-18:30  | Social Activities   |   |  |   |

## B. List of Plenary talks, Invited talks, Oral talks and Posters

### Plenary Talks

| Monday May 7th  |             |                            |  |  |                        |
|-----------------|-------------|----------------------------|--|--|------------------------|
|                 | 8:10~8:20   | Opening ceremony           |  |  | Chair: Shaoen Jiang    |
| 1               | 8:20~9:05   | <b>Shaoping Zhu</b>        | Science and Technology on Plasma Physics Laboratory, China               | <b>Plenary Talk:</b> Status and Progress of Science Challenge Project                                | Chair: Weiyan Zhang    |
| 2               | 9:05~9:50   | <b>Kazuo A. Tanaka</b>     | Extreme Light Infrastructure-NP, Romania                                 | <b>Plenary Talk:</b> ELI-NP Status and Plan  |                        |
|                 | 9:50~10:30  | Group photo & Coffee Break |  |  |                        |
| 3               | 10:30~11:15 | <b>Ho-Kwang Mao</b>        | Center for High Pressure Science and Technology Advanced Research, China | <b>Plenary Talk:</b> Probing Dense Matter with Extreme Radiations                                    | Chair: Kazuo A. Tanaka |
| 4               | 11:15~12:00 | <b>Victor Malka</b>        | Centre National de Larecherche Scientifique, France                      | <b>Plenary Talk:</b> Manipulating relativistic electrons with lasers                                 |                        |
| Tuesday May 8th |             |                            |  |  |                        |
| 5               | 8:00~8:45   | <b>Michael Campbell</b>    | Laboratory for Laser Energetics, University of Rochester, USA            | <b>Plenary Talk:</b> Laser-Plasma Interaction Physics and Direct Drive: Challenges, and Path Forward | Chair: Jianjun Deng    |

|                          |             |                        |  |  |                                     |
|--------------------------|-------------|------------------------|--|--|-------------------------------------|
| 6                        | 8:45~9:30   | <b>Wanguo Zheng</b>    | Laser Fusion Research Center, CAEP, China                                | <b>Plenary Talk:</b> Status of SG-III Laser Facility for Inertial Confinement Fusion                                 |                                     |
| 7                        | 9:30~10:15  | <b>Thomas Mattsson</b> | Sandia National Laboratory, USA  | <b>Plenary Talk:</b> The Z Fundamental Science Program   |                                     |
|                          | 10:15~10:30 | Coffee Break           |  |  |                                     |
| 8                        | 10:30~11:15 | <b>Weiping Xie</b>     | Institute of Fluid Physics, CAEP, China                                  | <b>Plenary Talk:</b> Electromagnetically Driven Research in IFP-Progresses and Perspectives                          | <b>Chair: Jeremy Chittenden</b>     |
| 9                        | 11:15~12:00 | <b>Sergey Lebedev</b>  | Imperial College London, UK  | <b>Plenary Talk:</b> Z-pinch Driven Experiments with Supersonic Magnetized Plasma Flows                              |                                     |
| <b>Wednesday May 9th</b> |             |                        |  |  |                                     |
| 10                       | 8:00~8:45   | <b>Zhengming Sheng</b> | Shanghai Jiao Tong University, China                                     | <b>Plenary Talk:</b> Plasma Photonics for Applications from Laser Particle Acceleration to Laser Fusion              | <b>Chair: Dieter H. H. Hoffmann</b> |
|                          | 8:45~9:30   | <b>Vladimir Fortov</b> | Joint Institute for High Temperature, Russian Academy of Science, Russia | <b>Plenary Talk:</b> Quasi-adiabatic Multi-shock Compression of Strongly Coupled Plasmas: Nonideality and Degeneracy |                                     |
| 12                       | 9:30~10:15  | <b>Hongwei Zhao</b>    | Institute of Modern Physics, CAS, China                                  | <b>Plenary Talk:</b> Intense Heavy-ion Beam for High Energy Density Physics: Opportunities and Challenges            |                                     |

|                          |             |                           |   |   |                                |
|--------------------------|-------------|---------------------------|---|---|--------------------------------|
|                          | 10:15~10:30 | Coffee Break              |   |   |                                |
| 13                       | 10:30~11:15 | <b>Jing Chen</b>          | Institute of Applied Physics and Computational Mathematics, China | <b>Plenary Talk:</b> Quantum Interference Effect in Atomic Double Ionization in Intense Laser Field | <b>Chair: Vladimir Fortov</b>  |
| 14                       | 11:15~12:00 | <b>Nicolas Sisourat</b>   | Sorbonne Université, France                                       | <b>Plenary Talk:</b> Superexchange Interatomic Coulombic Decay                                      |                                |
| <b>Thursday May 10th</b> |             |                           |   |   |                                |
| 15                       | 8:30~9:15   | <b>Dimitri Batani</b>     | University of Bordeaux, France                                    | <b>Plenary Talk:</b> Physics of Shock Ignition Approach to ICF                                      | <b>Chair: Zhengming Sheng</b>  |
| 16                       | 9:15~10:00  | <b>Qian Yue</b>           | Tsinghua University, China  | <b>Plenary Talk:</b> Recent Status and Prospects of CJPL and Dark Matter Experiments in China       |                                |
|                          | 10:00~10:15 | Coffee Break              |   |   |                                |
| 17                       | 10:15~11:00 | <b>Praveen Ramaprabhu</b> | The University of North Carolina at Charlotte, USA                | <b>Plenary Talk:</b> The Lives and Times of Ejecta from Shocked Metals                              | <b>Chair: Michael Campbell</b> |
| 18                       | 11:00~11:45 | <b>Ke Lan</b>             | Institute of Applied Physics and Computational Mathematics, China | <b>Plenary Talk:</b> Theoretical Study and Experimental Campaign on the SG-III                      |                                |

## Fundamental physics at extremes

| Monday May 7th                          |             |                     |   |  |                                 |
|---|-------------|---------------------|---|--|---------------------------------|
| I-1:<br>Fundamental physics at extremes | 14:00-14:25 | Masakatsu Murakami  | Osaka University, Japan   | <b>invited talk:</b> Generation of Ultrahigh Field by Micro-bubble Coulomb Implosion                   | <b>Chair: Sergey Rykovanov</b>  |
|   | 14:25-14:50 | Haifeng Liu (刘海风)   | Institute of Applied Physics and Computational Mathematics, China                                     | <b>invited talk:</b> Progress on the Wide Range Equation of State of Hydrogen and Its Isotopes         |                                 |
|   | 14:50-15:05 | Yongli Ping (平永利)   | Beijing Normal University, China  | Asymmetric Magnetic Reconnection Driven by Two Femtosecond Lasers                                      |                                 |
|   | 15:05-15:20 | Yong Hou (侯永)       | National University of Defense Technology, China  | Multi-charge-state Molecular Dynamics and Self-diffusion Coefficient in the Warm Dense Matter Regime   |                                 |
|   | 15:20-15:35 | Jiangtao Li (李江涛)   | National Key Laboratory of Shock Wave and Detonation Physics, Institute of Fluid Physics, CAEP, China | The Equation of State of Nitrogen in the Dissociation Regime   |                                 |
|   | 15:35-15:50 | Xiaofeng Li (李晓锋)   | Shanghai Jiao Tong University, China  | A Nano-structured Device toward High-contrast Intense Short-pulse Laser                                |                                 |
|   | 15:50-16:10 | <b>Coffee Break</b> |   |  |                                 |
| I-2:<br>Fundamental physics at extremes | 16:10-16:35 | Xiaochuan Pan       | University of Chicago, USA  | <b>invited talk:</b> An Optimization-based Method for Solving Non-linear Data Model in Multi-energy CT | <b>Chair: Haifeng Liu (刘海风)</b> |
|   | 16:35-17:00 | Sergey Rykovanov    | Helmholtz Institute Jena, Germany   | <b>invited talk:</b> Tunable Polarization X- and Gamma-ray Source Based on a Plasma Undulator          |                                 |
|   | 17:00-17:15 | Jianxing Li (栗建兴)   | Xi'an Jiaotong University, China  | Single-shot Carrier-envelope Phase Determination of Long Superintense Laser Pulses                     |                                 |
|   | 17:15-17:30 | Bo Zhang (张博)       | Science and Technology on Plasma Physics Laboratory, China  | Multi-photon effects of nonlinear Compton scattering in ultra intense fields                           |                                 |

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|--|-------------|-------------|---|---|--|
|  | 17:30-17:45 | Bo Han (韩波) | Beijing Normal University, China        | Contributions of Atomic Processes to the Emission of He-alpha Triplet     |  |
|  | 17:45-18:00 | Mu Li (李牧)  | Institute of Fluid Physics, CAEP, China | Continuous Sound Velocity Measurements along the Shock Hugoniot of Quartz |  |

**Tuesday May 8th**

|   |             |                     |   |  |                                 |
|---|-------------|---------------------|---|--|---------------------------------|
| I-3:<br>Fundamental physics at extremes | 14:00-14:25 | Ravindra Samtaney   | King Abdullah University of Science and Technology  | <b>invited talk:</b> Instability of a Non-thermal Interface in Converging Geometry with a Two-fluid Plasma Model                   | <b>Chair: Per Jönsson</b>       |
|   | 14:25-14:50 | Zhi Zeng (曾雉)       | Institute of Solid Physics, CAS, China  | <b>invited talk:</b> Theoretical Investigation of Iron Spin Crossover Pressure in Fe-bearing MgO                                   |                                 |
|   | 14:50-15:05 | Jun Li (李俊)         | INational Key Laboratory of Shock Wave and Detonation Physics, nstitute of Fluid Physics, CAEP, China | Investigation on Some Key Problems of the Dynamic-/static-melting Curve Discrepancy in the VB Group Elements                       |                                 |
|   | 15:05-15:20 | Qian Ma             | National University of Defense Technology, China  | Directly Calculated Electrical Conductivity of Hot Dense Hydrogen from Molecular Dynamics Simulation beyond Kubo-Greenwood Formula |                                 |
|   | 15:20-15:35 | Genbai Chu (储根柏)    | Science and Technology on Plasma Physics Laboratory, China  | High Energy X-ray Radiography of Laser Shock Metal Dynamic Fragmentation Using High Intensity Short Pulse Laser                    |                                 |
|   | 15:35-15:50 | Zhiyu He(贺芝宇)       | Shanghai Institute of Laser Plasma, CAEP, China   | Study on Shock Temperature Measurements of Laser-driven Materials  |                                 |
|   | 15:50-16:10 | <b>Coffee Break</b> |   |  |                                 |
| I-4:<br>Fundamental physics at extremes | 16:10-16:35 | Per Jönsson         | Malmö University, Sweden  | <b>invited talk:</b> Fully Relativistic Atomic Structure Calculations with Applications to Nuclear- and Astrophysics               | <b>Chair: Ravindra Samtaney</b> |
|   | 16:35-17:00 | Huayun Geng (耿华运)   | Institute of Fluid Physics, CAEP, China   | <b>invited talk:</b> Anomalous Mechanics in Simple Group VB Metals at High Pressures and Temperatures                              |                                 |

|  |             |               |   |  |  |
|--|-------------|---------------|---|--|--|
|  | 17:00-17:15 | Meng Lv (吕蒙)  | Sichuan University, China   | Intensity Induced X-ray Transparency in Aluminum and Silicon         |  |
|  | 17:15-17:30 | Xing Liu(刘兴)  | Peking University, China  | Ab initio Molecular Dynamics for Hydrocarbon up to 10 million Kelvin |  |
|  | 17:30-17:45 | Yindong Huang | National Institute of Defense Technology Innovation, China        | Air-Plasma Characterization at THz Frequency Range                   |  |
|  | 17:45-18:00 | Guicun Ma     | Institute of Applied Physics and Computational Mathematics, China | The High Pressure Equation of State of Polystyrene                   |  |

**Wednesday May 9th**

|   |             |                     |  |  |                                       |
|---|-------------|---------------------|--|--|---------------------------------------|
| I-5:<br>Fundamental physics at extremes | 14:00-14:25 | Qiang Zhang         | City University of Hong Kong, China                | <b>invited talk:</b> Shock Induced Unstable Interfacial Mixing in Compressible Fluids        | <b>Chair:<br/>Vladimir Tikhonchuk</b> |
|   | 14:25-14:50 | Hyun-Kyung Chung    | Gwangju Institute of Science and Technology, Korea | <b>invited talk:</b> Atomic processes in dense plasmas created by X-ray Free Electron Lasers |                                       |
|   | 14:50-15:05 | Yuanjie Huang (黄元杰) | Institute of Fluid Physics, CAEP, China            | Shock Waves Preparing Nanocrystalline Bismuth and c-BN Nanoparticles                         |                                       |
|   | 15:05-15:20 | Hua Shu (舒桦)        | Shanghai Institute of Laser Plasma, CAEP, China    | Hugoniot Measurement on Statically Pre-Compressed Water                                      |                                       |
|   | 15:20-15:35 | Ziyu Chen(陈自宇)      | Institute of Fluid Physics, CAEP, China            | Spectral Control of High Harmonics From Relativistic Plasmas Using Bicircular Fields         |                                       |

**Thursday May 10th**

|   |             |                |   |  |                           |
|---|-------------|----------------|---|--|---------------------------|
| I-6:<br>Fundamental physics at extremes | 14:00-14:25 | Predrag Krstic | Stony Brook University, USA             | <b>invited talk:</b> Synthesis of Boron-Nitride Nano-Structures in High-Temperature, High-Pressure Plasmas | <b>Chair: Qiang Zhang</b> |
|   | 14:25-14:50 | Martin Schanz  | Helmholtzzentrum GSI-Darmstadt, Germany | <b>invited talk:</b> PRIOR-II - A new Proton Radiography Facility for FAIR                                 |                           |



|   |             |                     |   |   |                                  |  |
|---|-------------|---------------------|---|---|----------------------------------|--|
|   | 14:50-15:15 | DuckYoung Kim       | Center for High Pressure Science and Technology Advanced Research, China                              | <b>invited talk:</b> Novel Oxidation State of Iron, Peroxide FeO <sub>2</sub> : Understanding Physical Properties and Implication to Geoscience |                                  |  |
|   | 15:15-15:30 | Chang Gao(高畅)       | Peking University, China  | Validity Boundary of Orbital-free Molecular Dynamics Method   |                                  |  |
|   | 15:30-15:45 | Yang Zhao (赵阳)      | Laser Fusion Research Center, CAEP, China   | The Experimental Study of Thermal Relaxation in Shocked Aluminum by K-Shell Photoabsorption Edge  |                                  |  |
|   | 15:45-16:00 | Chengjun Li (李成军)   | National Key Laboratory of Shock Wave and Detonation Physics, Institute of Fluid Physics, CAEP, China | Refractive Index Measurements of Atomic, Molecular and Mixed Gases at High Pressure up to 60 MPa  |                                  |  |
|   | 16:00-16:15 | <b>Coffee Break</b> |   |   |                                  |  |
| I-7:<br>Fundamental physics at extremes | 16:15-16:40 | Sergey A. Pikuz     | Joint Institute for High Temperature, Russia  | <b>invited talk:</b> Applications of High-resolution X-ray Spectroscopy   | <b>Chair:<br/>Predrag Krstic</b> |  |
|   | 16:40-17:05 | Xiuguang Huang(黄秀光) | Shanghai Institute of Laser Plasma, CAEP, China   | <b>invited talk:</b> Absolute Equation of State Measurement of Aluminum by Laser Driving Two-stage Flyer Plate Method                           |                                  |  |
|   | 17:05-17:20 | Zhiguo Li           | Institute of Fluid Physics, CAEP, China   | Multi-shock Compressions of Dense Cryogenic Hydrogen-helium Mixtures up to 60 GPa through the Molecular-to-atomic Transition Regime             |                                  |  |
|   | 17:20-17:35 | Baoxian Tian (田宝贤)  | China Institute of Atomic Energy Science, China   | Shock Waves of the High Velocity Flyer Driven by Long-Pulse Laser   |                                  |  |
|   | 17:35-17:50 | Wei Hong (洪伟)       | Science and Technology on Plasma Physics Laboratory, China  | Yield Enhancement of Short-Pulse-Laser Driven Neutron Source by Laser Cleaning Technique  |                                  |  |
|   | 17:50-18:05 | Guo Jia (贾果)        | Shanghai Institute of Laser Plasma, CAEP, China   | High Precision Equation of State of Iron at Pressure up to 2.4 TPa by Laser-Driven Shocks   |                                  |  |

Poster

|                                |   |  |
|--------------------------------|---|--|
| Murakami Masakatsu (村上匡且) 井上彰人 | Osaka University, Japan                                     | Laser – Driven Proton Acceleration using Nano Spherical Cannon   |
| Murakami Masakatsu (村上匡且) 井上彰人 | Osaka University, Japan                                     | Development of MD-PIC Hybrid Code for Coulomb Implosion  |
| Jiayong Zhong (仲佳勇)            | Beijing Normal University, China                            | Laser driven magnetic reconnection in low beta plasmas   |
| Junling Wang                   | Beijing Normal University, China                            | Electron-induced degradation of J-V characteristics of GaInP top cell and GaAs middle cell by electroluminescence measurements             |
| Kai Wang                       | Hebei University, China                                     | Accurate calculations of energy structures and radiation rates of L-shell ions of astrophysics interest                                    |
| Tao Wang                       | The PLA Information Engineering University, China           | TDOA Pattern Matching Localization Method  |
| Jian Gao (高健)                  | Shanghai Jiao Tong University, China                        | Influence of plasma density gradient on high-order harmonic generation from relativistic plasma surfaces                                   |
| Shenguang Liu (刘圣广)            | Shanghai Jiao Tong University, China                        | Demonstration of the EM wave measurement in the laser plasma probed by a single electron bunch   |
| Xiangdong Li (李向东)             | Shanghai Institute of Optics and Fine Mechanics, CAS, China | An improved ion-sphere model for the ionization of ion embedded in dense plasma  |
| Tingxian Zhang                 | Institute of physics and mathematics, CAS, China            | Theoretical study of the oscillator strengths of the transitions between the $3s^{21}S_0$ , $3s3p^3P_0, 1, 21P_0$ states for Mg-like ions* |
| Changbing Lu (鲁昌兵)             | China Institute of Atomic Energy Science, China             | study on the algorithm of 14MeV fast neutron radiography   |
| Zhiwei Lin                     | Laser Fusion Research Center, CAEP, China                   | The point explosion with radiation transport   |
| Bo Qing (青波)                   | Laser Fusion Research Center, CAEP, China                   | X-ray Spectral Measurements of a Highly Ionized Non-Local-Thermodynamic-Equilibrium Laser-Produced Au Plasma                               |
| Sanwei Li (李三伟)                | Laser Fusion Research Center, CAEP, China                   | Study on the movement of gold bubble plasma in hohlraum  |

|                   |   |   |
|-------------------|---|---|
| Shukai He (贺书凯)   | Laser Fusion Research Center, CAEP, China                         | Charged particle activation analysis for characterization of laser-accelerated protons  |
| Shaoyi Wang (王少义) | Laser Fusion Research Center, CAEP, China                         | Attosecond X-ray generation driven by the relativistic laser pulse based on the semi-analytical selfconsistent theory                         |
| Wei Fan (范伟)      | Laser Fusion Research Center, CAEP, China                         | Experiment research on dynamic response of Copper Film at high strain rate by chirped pulse spectral interferometry                           |
| Fang Tan (谭放)     | Laser Fusion Research Center, CAEP, China                         | Compact all-optical Thomson scattering source based on shock wave injection and cascaded laser wakefield accelerator                          |
| Gang Xiong (熊刚)   | Laser Fusion Research Center, CAEP, China                         | Development of multi-keV X-ray sources at the Shenguang-III prototype facility  |
| Jing Wang (王静)    | Laser Fusion Research Center, CAEP, China                         | Detection efficiency calibration of CsI(Tl) scintillator with 2000eV-2800eV soft X-Ray energy emitting  |
| Bin Duan (段斌)     | Institute of Applied Physics and Computational Mathematics, China | The Calculations of the profile of $\beta$ line in argon Ar XVII ions   |
| Fuyang Zhou (周福阳) | Institute of Applied Physics and Computational Mathematics, China | Many-particle correlation effects on the electron screened potential of non-ideal plasmas   |
| Junwen Gao (高俊文)  | Institute of Applied Physics and Computational Mathematics, China | State-selective electron transfer in low and intermediate energy $\text{He}^{\{+\}}$ + He collisions  |
| Hao Cheng         | Institute of Applied Physics and Computational Mathematics, China | Enhancement of radiation pressure acceleration with a strong magnetic field   |
| Lei Liu (刘蕾)      | Institute of Fluid Physics, CAEP, China                           | Quantum molecular dynamics study on the proton exchange, ionic structures, and transport properties of warm dense hydrogen-deuterium mixtures |
| Bozhong Tan (谭伯仲) | Institute of Fluid Physics, CAEP, China                           | Study on Si K-edge XANES experiment based on laser-plasma M-band radiation source   |
| Liang Sun (孙亮)    | Laser Fusion Research Center, CAEP, China                         | The simulation study of laser shocked plastic by x-ray radiography  |
| Fan Zhang (张帆)    | Shanghai Institute of Laser Plasma, CAEP, China                   | The in-situ diagnosis of shock-compressed iron  |

## Pulsed power and application

| Monday May 7th                    |             |                     |   |   |                       |  |
|-----------------------------------|-------------|---------------------|---|---|-----------------------|--|
| II-1 Pulsed power and application | 14:00-14:25 | Bucur Novac         | Loughborough University, UK                                       | invited talk: Fast Filamentary Numerical Modelling Applied to High-Current, Pulsed Power Applications                       | Chair: Meng Wang (王勳) |  |
|                                   | 14:25-14:50 | Xinxin Wang (王新新)   | Tsinghua University, China  | invited talk: Research on Electrical Explosion of Wire in Tsinghua University   |                       |  |
|                                   | 14:50-15:05 | Liang Sheng (盛亮)    | Northwest Institute of Nuclear Technology, China                  | Experimental Study on Electrical Exploding of Wire and Film Related to Z Pinch at NINT                                      |                       |  |
|                                   | 15:05-15:20 | Ping Wu (吴平)        | Tsinghua University, China  | The Effect Experiment of CCD Imaging System Against High Power Electromagnetic Pulse  |                       |  |
|                                   | 15:20-15:35 | Mo Li (李沫)          | Northwest Institute of Nuclear Technology, China                  | Study of Tungsten Wire Explosion Symmetry on Negative Discharge Facility  |                       |  |
|                                   | 15:35-15:50 | Lifei Hou (侯立飞)     | Laser Fusion Research Center, CAEP, China                         | A Novel CVD Diamond X-ray Detector  |                       |  |
|                                   | 15:50-16:10 | <b>Coffee Break</b> |   |   |                       |  |
| II-2 Pulsed power and application | 16:10-16:35 | Kyle Peterson       | Sandia National Laboratories, USA                                 | <b>invited talk:</b> Progress and Plans in Magnetized Liner Inertial Laser Fusion Research                                  | Chair: Sergey Lebedev |  |
|                                   | 16:35-17:00 | Delong Xiao         | Institute of Applied Physics and Computational Mathematics, China | <b>invited talk:</b> Radiation Transfer of Cylindrical Z-pinch Dynamic Hohlraum and Its Interaction with a Spherical Target |                       |  |
|                                   | 17:00-17:15 | Shaolong Zhang(张绍龙) | Institute of Fluid Physics, CAEP, China                           | Preliminary Result of Viscous Measurement of Tin on the PTS Facility  |                       |  |
|                                   | 17:15-17:30 | Liuxia Li           | Tsinghua University, China  | First Observation of Shock Wave with Piezoelectric Gauges by Wire Melting in Underwater Electrical Wire Explosion           |                       |  |
|                                   | 17:30-17:45 | Yuji Wu (吴宇际)       | Laser Fusion Research Center, CAEP, China                         | Research on a Wide-Angle Diagnostic Method for Shock Wave Velocity at SG-III Prototype Facility                             |                       |  |

| Tuesday May 8th                   |             |                      |   |  |                             |  |
|-----------------------------------|-------------|----------------------|---|--|-----------------------------|--|
| II-3 Pulsed power and application | 14:00-14:25 | Edl Schamiloglu      | University of New Mexico, USA                                     | <b>invited talk:</b> HPM Sources: Magnetrons and Metamaterial Slow Wave Structures - More in Common Than Not               | Chair: Huichun Wu ( 武慧春 )   |  |
|                                   | 14:25-14:50 | Peitian Cong ( 丛培天 ) | Northwest Institute of Nuclear Technology, China                  | <b>invited talk:</b> Life Time of the LTD Gas Switch Developed by NINT   |                             |  |
|                                   | 14:50-15:05 | Yunsheng Jiang(姜云升)  | Tsinghua University, China  | Measurement of EMP Environment Inside Target Chamber of SG-III   |                             |  |
|                                   | 15:05-15:20 | Bing Teng ( 滕冰 )     | Qingdao University, China   | Study on Organic Nonlinear Optical Crystal DAST and Its Application in Terahertz Generation                                |                             |  |
|                                   | 15:20-15:35 | Wei Yang(杨薇)         | Institute of Applied Physics and Computational Mathematics, China | Spatial and Temporal Characteristics of Focused Microwave Beam Discharge in Nitrogen                                       |                             |  |
|                                   | 15:35-15:50 | Longfei Niu ( 牛龙飞)   | Laser Fusion Research Center, CAEP, China                         | Surface Cleanliness Improvements Based on Contamination Inspection and Removal Methods in SG-III High Power Laser Facility |                             |  |
|                                   | 15:50-16:10 | <b>Coffee Break</b>  |   |  |                             |  |
| II-4 Pulsed power and application | 16:10-16:35 | Victor F. Tarasenko  | Institute of High Current Electronics, Russia                     | <b>invited talk:</b> Spectral and Amplitude-time Characteristics of Crystals Excited by a Runaway Electron Beam            | Chair: Linwen Zhang ( 章林文 ) |  |
|                                   | 16:35-17:00 | Meng Wang ( 王勳 )     | Institute of Fluid Physics, CAEP, China                           | <b>invited talk:</b> A Novel Rep-Rate LTD  |                             |  |
|                                   | 17:00-17:15 | Fengju Sun ( 孙凤举 )   | Northwest Institute of Nuclear Technology, China                  | Conception Design of 30 MA Fast Linear Transformer Driver Based on Sharing Shell and Stage-Triggering in Sequence          |                             |  |
|                                   | 17:15-17:30 | Hanbing Jin ( 金晗冰)   | Tsinghua University, China  | Study of Electromagnetic Pulse Generation at High Power Laser Facilities   |                             |  |
|                                   | 17:30-17:45 | Guiling Wang(王)      | Institute of Fluid Physics, CAEP, China                           | Current design and pulse shaping techniques on PTS facility  |                             |  |

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|  |             | 贵林)             |                            |  |  |
|  | 17:45-18:00 | Zhiqian Xu(徐志谦) | Tsinghua University, China | Theoretical and Experimental Evaluation of Cable SGEMP Response in the SG-III Laser Facility |  |

| Wednesday May 9th                     |             |                    |   |  |                             |
|---------------------------------------|-------------|--------------------|---|--|-----------------------------|
| II-5 Discharge, laser and diagnostics | 14:00-14:25 | Huichun Wu ( 武慧春 ) | Zhejiang University, China                | <b>invited talk:</b> Generation of Gigawatt Attosecond Pulses from Relativistic Electron Sheets  | Chair: Peitian Cong ( 丛培天 ) |
|                                       | 14:25-14:50 | Tatiana Pikuz      | Osaka University, Japan                   | <b>invited talk:</b> Development of X-ray Phase Contrast Imaging Method for Investigation of Rayleigh-Taylor Instabilities in the Context of Laboratory Astrophysics |                             |
|                                       | 14:50-15:05 | Zhaoyun Zong (宗兆玉) | Laser Fusion Research Center, CAEP, China | Research on Spectral Failsafe System of High Power Laser Using Dual Fiber Bragg Gratings   |                             |
|                                       | 15:05-15:20 | Kai Deng(邓锴)       | Tsinghua University, China                | Development and Test of a 32keV X-ray Talbot-Lau Interferometer  |                             |
|                                       | 15:20-15:35 | Fang Wang (王芳)     | Laser Fusion Research Center, CAEP, China | Fifth Harmonic Generation of Nd:glass Lasers in ADP Crystals   |                             |
|                                       | 15:35-15:50 | Deyan Zhu (朱德燕)    | Laser Fusion Research Center, CAEP, China | Optimized Design of Separated Final Optics Assembly  |                             |

### Poster

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|-----------------|---|--|
| Zhanchang Huang | Institute of Nuclear Physics and Chemistry, CAEP, China             | Ultraviolet frame camera diagnosis in foil liner implosion experiments               |
| Yaojun Li (李曜均) | Shanghai Jiao Tong University, China                                | Characterisation of plastic scintillators for detection of laser-accelerated protons |
| Jihu Wang (王继虎) | Institute for Aeronautical Meteorology and nuclear radiation, China | Measurement of Pulsed X-Ray Energy Spectrum Based on Transmission Measurements       |
| Naicheng Lv     | Tsinghua University, China  | Effect of Radial Electric Field on Electrical Explosion of Wires in Vacuum           |

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|--------------------|---|---|
| Han Gao (高涵)       | Qingdao University, China                         | The effect of growth temperature on the homogeneity of DKDP crystal   |
| Weihao Tie (铁维昊)   | Tsinghua University, China                        | Numerical Analysis of Nonlinear Inductor Effect on Modulated Characteristics of Gyro-magnetic Nonlinear Transmission Line |
| Shuchao Duan       | Institute of Fluid Physics, CAEP, China           | Generating of a rotating drive magnetic field for the alternant Theta-Z pinch Liner Inertial Fusion concept               |
| Pingquan Fan (范全平) | Laser Fusion Research Center, CAEP, China         | The realization of long focal depth with a linear varied-area zone plate  |
| Yapeng Fu          | The PLA Information Engineering University, China | Research on Resistance Matching Method to Reduce the Transient Grounding Resistance of Vertical Grounding Rod             |
| Jingming Gao (高景明) | National University of Defense Technology, China  | Circuit simulation of synchronization of double magnetic pulse compression modules  |
| Yi Chen (谌怡)       | Institute of Fluid Physics, CAEP, China           | Anode failure mechanism of GaAs photoconductive semiconductor switch triggered by laser diode                             |
| Yi Liu (刘毅)        | Institute of Fluid Physics, CAEP, China           | The Role of Conducting Current to Conducting Resistance of GaAs-PCSS in Nonlinear Mode                                    |
| Wei Wang (王卫)      | Institute of Fluid Physics, CAEP, China           | Experiments on multi-stage continuous acceleration of proton beam in dielectric wall accelerator                          |
| Mao Ye (叶茂)        | Institute of Fluid Physics, CAEP, China           | Research on the power sources decoupling at IFP's Dielectric Wall Accelerator   |
| Tao Wang (王韬)      | Institute of Fluid Physics, CAEP, China           | A high-current ultra-short pulsed vacuum arc ion source   |
| Liangji Zhou (周良骥) | Institute of Fluid Physics, CAEP, China           | A Low Inductance Current Convergence Configuration for Large Repetitive Z-pinch Driver                                    |
| Yong He (何勇)       | Institute of Fluid Physics, CAEP, China           | Design of a multi-turn railgun for accelerating heavy vehicle to high speed   |
| Xiangxu Chai (柴向旭) | Laser Fusion Research Center, CAEP, China         | Noncritical phase-matched fourth harmonic generation of converging beam by DKDP crystal                                   |
| Haoyu Yuan (元浩宇)   | Laser Fusion Research Center, CAEP, China         | Technique of puniness object extractive based on crystal birefringence  |
| Lidan Zhou (周丽丹)   | Laser Fusion Research Center, CAEP, China         | Theoretical researches on small-scale self-focusing of high-power laser with multi-wavelengths                            |
| Jiao Xue (薛峤)      | Laser Fusion Research Center, CAEP, China         | Process-oriented adaptive optics control method in the multi-pass amplifiers  |

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|------------------------|---|---|
| Ke Yao (姚轲)            | Laser Fusion Research Center, CAEP, China         | 1J, 1Hz ultra-multi-pass Neodymium glass laser amplifier with high efficiency and excellent beam quality                                    |
| Xiaoxia Huang (黄小霞)    | Laser Fusion Research Center, CAEP, China         | The pulsed waveform shaping in SG-III laser facility  |
| Xiaolu Zhang (张晓璐)     | Laser Fusion Research Center, CAEP, China         | Research on the shooting accuracy of ICF laser device based on radiation fluid  |
| Lijun Zhang (张丽娟)      | Laser Fusion Research Center, CAEP, China         | Influence of annealing atmospheres on the nanometer-scaled defects in fused silica defect layer   |
| Xiaolong Jiang (蒋晓龙)   | Laser Fusion Research Center, CAEP, China         | Optimum inductively coupled plasma etching technique for obtaining subsurface damage free fused silica needed in high power laser system    |
| Chuangchao Zhang (张传超) | Laser Fusion Research Center, CAEP, China         | Surface Damage Mitigation of Large-Aperture Fused Silica Optics for High Power Laser  |
| Bo Zhang (张波)          | Laser Fusion Research Center, CAEP, China         | High fidelity Frequency Modulation Pulse Waveform Centralized Measurement Technology for High Power Laser Facility                          |
| Hao Peng (彭浩)          | Laser Fusion Research Center, CAEP, China         | Forward Raman scattering of the seed pulse in strongly coupled stimulated Brillouin amplification in plasma                                 |
| Jinhai Zhang           | Tsinghua University, China                        | The suppression of core-corona structure for aluminum wire array and its influence on the implosion dynamics under a current of mega-ampere |
| Yuancheng Wang (王渊承)   | Laser Fusion Research Center, CAEP, China         | Polarization smoothing for single beam by a nematic liquid crystal scrambler  |
| Minqiang Kang (康民强)    | Laser Fusion Research Center, CAEP, China         | Midinfrared extracavity optical parametric oscillator based on BaGa <sub>4</sub> Se <sub>7</sub> crystal                                    |
| Mingxian Kan           | Institute of Fluid Physics, CAEP, China           | Simulation of the magnetically driven flyer plate experiment with an improved magnetic field boundary formula                               |
| Xiaowei Chen           | Amplitude laser group – Lisses operations, France | CEP-stabilized, TW-class, 18 fs, 1 kHz, Ti: Sapphire laser system with an original front-end design   |
| Liangping Wang         | Northwest Institute of Nuclear Technology, China  | Estimation of the Neutron Generation from Gas Puff Z-pinch on Qiangguang Facility   |
| Wanqing Huang (黄晚晴)    | Laser Fusion Research Center, CAEP, China         | Modeling and analysis of the depolarization in large laser facility   |



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| Zongshu Mei (梅宗书) | Xi'an high and New Technology Research Institute, China | Numerical simulation of laser ablation of Stainless steel |
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## Laser and particle beam fusion, magnetic driven fusion

| Monday May 7th  |             |                     |  |   |                              |
|---|-------------|---------------------|--|---|------------------------------|
| III-1: Laser and particle beam fusion, magnetic driven fusion | 14:00-14:25 | Sean Regan          | Laboratory for Laser Energetics, University of Rochester, USA  | <b>invited talk:</b> The U.S. National Direct-Drive Inertial Confinement Fusion Program                   | Chair: Dieter H. H. Hoffmann |
|   | 14:25-14:50 | Stefano Atzeni      | Univeristy of Rome, Italy  | <b>invited talk:</b> Hydrodynamic Studies of Shock Ignition Targets                                       |                              |
|   | 14:50-15:15 | Alexander Golubev   | Institute of Theoretical and Experimental Physics named by A.I.Alikhanov of National Research Center "Kurchatov Institute" | <b>invited talk:</b> High Energy Density Physics at FAIR  |                              |
|   | 15:15-15:30 | Liang Guo (郭亮)      | Laser Fusion Research Center, CAEP, China  | Experimental Study on the Energetics of Uranium Planar Targets Drove by Lasers                            |                              |
|   | 15:30-15:45 | Hui Cao (曹辉)        | Institute of Applied Physics and Computational Mathematics, China  | Design of Octahedral Spherical Hohlräum for CH Rev5 Ignition Capsule                                      |                              |
|   | 15:45-16:00 | Bolun Chen (陈伯伦)    | Laser Fusion Research Center, CAEP, China  | Experimental Progress on Pulse Shaped Implosion Performance at 40TW drive on SG-III Facility              |                              |
|   | 16:00-16:15 | <b>Coffee Break</b> |  |   |                              |
| III-2: Laser and particle beam fusion, magnetic driven fusion | 16:15-16:40 | Hongbo Cai(蔡洪波)     | Institute of Applied Physics and Computational Mathematics, China  | <b>invited talk:</b> Study of the Kinetic Effects in Indirect-Drive Inertial Confinement Fusion Hohlräume | Chair: Stefano Atzeni        |
|   | 16:40-17:05 | Shigeo Kawata       | Utsunomiya University, Japan   | <b>invited talk:</b> Robust Heavy Ion Inertial Fusion   |                              |
|   | 17:05-17:30 | Zhimin Hu (胡智民)     | Laser Fusion Research Center, CAEP, China  | <b>invited talk:</b> Mixing Effect Investigation with Xenon-Doped Capsule Implosion Experiments           |                              |

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|---|-------------|---------------------|---|---|---------------------------|
|   | 17:30-17:45 | Shuai Zhang(张帅)     | Peking University, China  | Weakly Nonlinear Analysis of RTI with BP Effect Evolving on Converging Finite-thickness Cylindrical Shell             |                           |
|   | 17:45-18:00 | Yongsheng Li (李永升)  | Institute of Applied Physics and Computational Mathematics, China | The Formation of “Bubble-Bubble” Structure of Imploding ICF Target Shells   |                           |
|   | 18:00-18:15 | Shaoyong Tu (涂绍勇)   | Laser Fusion Research Center, CAEP, China                         | Experimental Study on Hydrodynamics Instability in Radiation-Driven Cylindrical Implosions on SG-III Laser Facilities |                           |
| <b>Tuesday May 8th</b>  |             |                     |   |   |                           |
| III-3: Laser and particle beam fusion, magnetic driven fusion | 14:00-14:25 | Claude Deutsch      | Université Paris-Sud, France                                      | <b>invited talk:</b> Correlated Ion Stopping in Ultra-dense Plasmas of ICF Concern                                    | Chair: Chikang Li         |
|   | 14:25-14:50 | Yongtao Zhao (赵永涛)  | Xi'an Jiaotong University, China                                  | <b>invited talk:</b> Stopping and Wakefield Modulation of Ion Beam in Plasma  |                           |
|   | 14:50-15:15 | Hideaki Habara      | Osaka University, Japan   | <b>invited talk:</b> Visualization of Energy Transport in the Imploded Plasma for Super-penetration Fast Ignition     |                           |
|   | 15:15-15:30 | Bin He (何斌)         | Institute of Applied Physics and Computational Mathematics, China | Electron-ion Energy Partition for Alpha Particle Moving in Fusion DT Plasmas Mixed with Hot Au and Be                 |                           |
|   | 15:30-15:45 | Tao Gong (龚韬)       | Laser Fusion Research Center, CAEP, China                         | Quantitative analysis of the K-alpha emission from a Cu doped CD shell target   |                           |
|   | 15:45-16:00 | Kaihong Fang (方开洪)  | Lanzhou University, China   | Environmental Abnormal Screening Effects on Light-Nuclei Sub-barrier Nuclear Fusion                                   |                           |
|   | 16:00-16:15 | <b>Coffee Break</b> |   |   |                           |
| III-4: Laser and particle beam fusion, magnetic               | 16:15-16:40 | Chikang Li          | Massachusetts Institute of Technology, USA                        | <b>invited talk:</b> Exploring the Multi-ion-fluid Effects in ICF Implosions  | Chair: Yongtao Zhao (赵永涛) |
|   | 16:40-17:05 | Zhurong Cao (曹柱荣)   | Laser Fusion Research Center, CAEP, China                         | <b>invited talk:</b> Development of Spatial-, Temporal-, and Spectral-Resolved X-ray Diagnostic Instruments           |                           |

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| driven fusion |             |                    |   | for ICF Experiments on SG Laser Facility in China   |  |
|               | 17:05-17:30 | Hideo Nagatomo     | Osaka University, Japan                                       | <b>invited talk:</b> Radiation Hydrodynamic Simulation with Nonlocal Electron Thermal Conduction Model in Strong Magnetic Field |  |
|               | 17:30-17:45 | Jingwei Wang (王精伟) | Shanghai Institute of Optics and Fine Mechanics, CAS, China   | High Quality X-ray/Gamma-ray Radiation from a Plasma Undulator  |  |
|               | 17:45-18:00 | Jian Wu (吴坚)       | Xi'an Jiaotong University, China                              | Initial Plasmas of Thick Cylindrical Liner Obtained by End-on Laser Interferometry  |  |
|               | 18:00-18:15 | Xing Wang(王兴)      | Xi'an Institute of Optics and Precision Mechanics, CAS, China | The Development of High Performance Streak Cameras in XIOPM   |  |

| Wednesday May 9th   |             |                       |   |   |                       |
|---|-------------|-----------------------|---|---|-----------------------|
| III-5: Laser and particle beam fusion, magnetic driven fusion | 14:00-14:25 | Dieter H. H. Hoffmann | Technische Universität Darmstadt, Germany                                       | <b>invited talk:</b> Activation of structural material of intense beam accelerators due to beam loss                      | Chair: Feng Wang (王峰) |
|   | 14:25-14:50 | Jochen Linke          | Forschungszentrum Jülich GmbH, Institut für Energie und Klimaforschung, Germany | <b>invited talk:</b> Challenges for Plasma-Facing Components in Nuclear Fusion  |                       |
|   | 14:50-15:15 | Wanli Shang (尚万里)     | Laser Fusion Research Center, CAEP, China                                       | <b>invited talk:</b> The Properties of Hot-spot Emission in a Warm Plastic-shell Implosion on OMEGA                       |                       |
|   | 15:15-15:30 | Guanqiong Wang(王冠琼)   | Institute of Applied Physics and Computational Mathematics, China               | Numerical Study of the Striation Formation During the Early Phases of the Cylindrical Foil Implosions on the PTS Facility |                       |
|   | 15:30-15:45 | Yunsong Dong (董云松)    | Laser Fusion Research Center, CAEP, China                                       | Efficient Nanosecond X-ray Sources from Laser-irradiated Metallic Targets with Low Initial Density                        |                       |
|   | 15:45-16:00 | Xing Zhang(张兴)        | Laser Fusion Research Center, CAEP, China                                       | A Bright Pulsed Fusion Neutron Source by the Laser-Driven Spherically Convergent Plasma Fusion                            |                       |

| Thursday May 10th   |             |                     |   |  |                        |  |
|---|-------------|---------------------|---|--|------------------------|--|
| III-6: Laser and particle beam fusion, magnetic driven fusion | 14:00-14:25 | Jeremy Chittenden   | Imperial College London, UK                                       | <b>invited talk:</b> Indirect-drive Inertial Confinement Fusion Simulations at the Centre for Inertial Fusion Studies                  | Chair: Javier Honrubia |  |
|   | 14:25-14:50 | Rafael Ramis        | Polytechnic University of Madrid, Spain                           | <b>invited talk:</b> 3D Simulations of Realistic Laser Driven Spherical Implosions   |                        |  |
|   | 14:50-15:15 | Yanyun Ma(马燕云)      | National University of Defense Technology, China                  | <b>invited talk:</b> Progress on Radiation Hydrodynamics Simulations of ICF at NUDT  |                        |  |
|   | 15:15-15:30 | Lu Zhang (张璐)       | Laser Fusion Research Center, CAEP, China                         | Use of Foam Gold to Improve Hohlraum's Performance   |                        |  |
|   | 15:30-15:45 | Yanjun Gu           | ELI-Beamlines, Czechia  | Two-dimensional Simulations of Parametric Instabilities in the context of the Shock Ignition   |                        |  |
|   | 15:45-16:00 | Tiankui Zhang (张天奎) | Science and Technology on Plasma Physics Laboratory, China        | Design and Preliminary Experiment of Laser Plasma X-ray Using Source Coded   |                        |  |
|   | 16:00-16:15 | <b>Coffee Break</b> |   |  |                        |  |
| III-7: Laser and particle beam fusion, magnetic driven fusion | 16:15-16:40 | Javier Honrubia     | Polytechnic University of Madrid, Spain                           | <b>invited talk:</b> Three-dimensional Hybrid Modelling of High Intensity Ion Beam Propagation in Plasmas                              | Chair: Rafael Ramis    |  |
|   | 16:40-17:05 | Feng Wang (王峰)      | Laser Fusion Research Center, CAEP, China                         | <b>invited talk :</b> Diagnostic Techniques for ICF on the ShenGuang-III Laser Facility in China                                       |                        |  |
|   | 17:05-17:30 | Cheng Ning (宁成)     | Institute of Applied Physics and Computational Mathematics, China | <b>invited talk:</b> The Implementation of Implicit Moment Particle-in-Cell Simulation Method in Z-pinch Dynamic Process Investigation |                        |  |
|   | 17:30-17:45 | Fuyuan Wu (吴福源)     | National University of Defense Technology, China                  | Numerical Studies on the Formation and Radiation Characteristics of Liner Z-pinch Dynamic Hohlraum                                     |                        |  |
|   | 17:45-18:00 | Chao Tian (田超)      | Science and Technology on Plasma Physics Laboratory, China        | Radiography of Inertial Confinement Fusion Implosions Using Hard X-rays Generated by a Short Laser Pulse                               |                        |  |

**Poster**

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| Yongteng Yuan (袁永腾) | Laser Fusion Research Center, CAEP, China        | Direct-drive Richtmyer-Meshkov Instability Experiment with Reshock on the Shenguang-III Prototype Laser Facility                        |
| Tianxuan Huang(黄天暄) | Laser Fusion Research Center, CAEP, China        | Integrated Implosion Experiments on Shenguang-III Laser Facility  |
| Qi Li (李琦)          | Laser Fusion Research Center, CAEP, China        | Fluorescence imaging for M-band drive symmetry measurement in hohlraum  |
| Bi Bi (毕碧)          | Laser Fusion Research Center, CAEP, China        | Implosion fuel density diagnosis of cone-in-shell target in indirect-driven fast ignition   |
| Ji Yan (晏骥)         | Laser Fusion Research Center, CAEP, China        | Preliminary design of Hybrid Spherically Convergent Plasma Fusion (SCPF) in SG-III  |
| Jiukuang Zhu        | Laser Fusion Research Center, CAEP, China        | Research on ultrafast X-ray detectors based on optical detection  |
| Ganghua Wang (王刚华)  | Institute of Fluid Physics, CAEP, China          | Simulation Codes for Magnetic Driven Experiments in IFP   |
| Xiaoyue Li          | National University of Defense Technology, China | Population distribution and K-shell radiative properties of argon plasmas in non-local thermodynamic equilibrium                        |
| Yanzhao Ke (柯延钊)    | National University of Defense Technology, China | High-energy-density plasma jet generated by laser-cone interaction  |
| Yanning Zhang       | Xi'an Jiaotong University, China                 | Relativistic stopping power for alpha particles and electrons in hot plasma   |
| Liling Li (李丽灵)     | Laser Fusion Research Center, CAEP, China        | Study of Gd-coated Au planar target radiation spectrum  |
| Jianhua Zhen (郑建华)  | Laser Fusion Research Center, CAEP, China        | Monte Carlo simulations of electron cascade in microchannel plates  |
| Longfei Jing (景龙飞)  | Laser Fusion Research Center, CAEP, China        | An improved view-factor method inclusion of plasma filling for angular distribution of radiation temperature from laser-driven hohlraum |
| Pin Yang (杨品)       | Laser Fusion Research Center, CAEP, China        | The measurement of Laser entrance hole of hohlraum on SG-III facility   |
| Zhenghua Yang (杨正华) | Laser Fusion Research Center, CAEP, China        | Monochromatic spherical bent crystal imaging system for Shenguan III laser facility   |

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|------------------------|---|---|
| Zhigang Deng (邓志刚)     | Laser Fusion Research Center, CAEP, China | Large-charge quasimonoenergetic electron beams produced by off-axis colliding laser pulses in underdense plasma   |
| Ao Sun (孙奥)            | Laser Fusion Research Center, CAEP, China | Method of Calibrating High-order Harmonics of Synchrotron Radiation Based on Filter   |
| Wei Jiang              | Laser Fusion Research Center, CAEP, China | Research of shaped pulse driven hohlraum asymmetry by 2D X-ray radiography  |
| Qiangqing Wang (王强强)   | Laser Fusion Research Center, CAEP, China | Development of X-ray framing camera for inertial confinement fusion experiments on SGIII laser facility   |
| Xiangming Liu (刘祥明)    | Laser Fusion Research Center, CAEP, China | The preheat and ultrafast carrier dynamics of diamond window material in VISAR  |
| Keli Deng (邓克力)        | Laser Fusion Research Center, CAEP, China | Design of Streaked Crystal Spectrometer On Shengguang III Laser Facility  |
| Zheng Yuan (袁铮)        | Laser Fusion Research Center, CAEP, China | A new method to measure temporal resolution of X-ray framing camera   |
| Bo Yu (余波)             | Laser Fusion Research Center, CAEP, China | Coaxial CVD diamond detector for neutron diagnostics at ShenGuangIII laser facility   |
| Chen Zhang (张琛)        | Laser Fusion Research Center, CAEP, China | Calibration and performance study of streaked optical pyrometer system in SG-III prototype facility for temperature measurement of compressed materials |
| Yudong Pu (蒲昱东)        | Laser Fusion Research Center, CAEP, China | Investigating effects of ablative Rayleigh-Taylor instability on implosion acceleration   |
| Zongqiang Yuan (袁宗强)   | Laser Fusion Research Center, CAEP, China | The effect of filled gas to the kinetic process of ICF hohlraum plasma interaction  |
| Jin Li (李晋)            | Laser Fusion Research Center, CAEP, China | A high performance X-ray streak camera for Laser-Plasma Interaction Studies   |
| Yong Chen (陈勇)         | Laser Fusion Research Center, CAEP, China | Higher order harmonics suppression in extreme ultraviolet and soft X-ray  |
| Yinzhong Wu            | Laser Fusion Research Center, CAEP, China | High efficiency terahertz diffraction grating with trapezoidal  |
| Minghai Yu (于明海)       | Laser Fusion Research Center, CAEP, China | Characterization of a high energy x-ray source produced by the SG-II-U laser facility   |
| Qiangqiang Zhang (张强强) | Laser Fusion Research Center, CAEP, China | Toward Gabor zone plates by modulating zones width  |

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|--------------------|---|--|
| Feng Lu (卢峰)       | Laser Fusion Research Center, CAEP, China                         | Calibration of Image Plate Scanner   |
| Zuhua yang (杨祖华)   | Laser Fusion Research Center, CAEP, China                         | A tool of X-LAB v1.5 for optical design and its application  |
| Xiaojia Li (李晓佳)   | Laser Fusion Research Center, CAEP, China                         | A novel superconducting magnetic levitation method to support the laser fusion capsule by using permanent magnets      |
| Tao Xu (徐涛)        | Laser Fusion Research Center, CAEP, China                         | Research on time-integrated spectrum of backscattered light in Shenguang-III laser facility                            |
| Yukun Li (黎宇坤)     | Laser Fusion Research Center, CAEP, China                         | An improved calculation of spectral response of gold and CsI photocathodes in a 10 - 100 keV X-ray energy region       |
| Jianjun Dong (董建军) | Laser Fusion Research Center, CAEP, China                         | Asymmetry diagnosis of implosion hot spot by using multi-channel Kirkpatrick-Baez microscope                           |
| Longyu Kuang(况龙钰)  | Laser Fusion Research Center, CAEP, China                         | Experimental study of megagauss magnetic field applications in laser indirect-drive inertial confinement fusion        |
| Kuan Ren (任宽)      | Laser Fusion Research Center, CAEP, China                         | First measurement of plasma stagnation radiation in a hohlraum in the Shenguang-III prototype                          |
| Xiaoguang Wang     | Institute of Applied Physics and Computational Mathematics, China | Simulation investigation of magneto-Rayleigh-Taylor instabilities in implosion of a thin liner drive by magnetic field |
| Jiaqin Dong        | Shanghai Institute of Laser Plasma, CAEP, China                   | Diagnostic progress of Laser direct-drive implosions on the SGIII prototype laser facility                             |
| Min Shui (税敏)      | Laser Fusion Research Center, CAEP, China                         | Primary study on the mixing of ejected fragments and foam  |
| Tao Xi (席涛)        | Laser Fusion Research Center, CAEP, China                         | Study On Dynamic Response Of Shocked Aluminum Under Laser Loading With Dynamic X-Ray Diffraction                       |
| Franck Falcoz      | Amplitude Technologies, France                                    | Towards high repetition rate ultra-intense lasers, latest developments at Amplitude Technologies                       |
| Franck Falcoz      | Amplitude Technologies, France                                    | High energy & high average power PUMP LASERS...The route to High average power petawatt lasers                         |

# Laser Plasma Interaction

| Monday May 7th                 |             |                       |   |   |                              |  |
|--------------------------------|-------------|-----------------------|---|---|------------------------------|--|
| IV-1: Laser Plasma Interaction | 14:00-14:25 | Kunioki Mima          | The Graduate School for the Creation of New Photonics Industries, Japan | <b>invited talk:</b> Laser Driven Ion Acceleration and Neutron Source   | Chair:<br>Lihua Cao<br>(曹莉华) |  |
|                                | 14:25-14:50 | Stefan Weber          | Institute of Physics, Czech Academy of Sciences, Czech Republic         | <b>invited talk:</b> High-Energy Photons and Positrons Produced in Laser-Plasma Interaction   |                              |  |
|                                | 14:50-15:15 | Vladimir Tikhonchuk   | University of Bordeaux, France  | <b>invited talk:</b> Generation of Strong Magnetic Fields with Lasers: from Nano- to Picoseconds                                    |                              |  |
|                                | 15:15-15:30 | Yuchi Wu (吴玉迟)        | Science and Technology on Plasma Physics Laboratory, China              | Towards High Energy Micro-CT Based on Micro-spot High Energy X-ray Source from Laser Wakefield Accelerator                          |                              |  |
|                                | 15:30-15:45 | Zhimeng Zhang (张智猛)   | Science and Technology on Plasma Physics Laboratory, China              | Generation of High-power Few-cycle Lasers via Brillouin-based Plasma Amplification  |                              |  |
|                                | 15:45-16:00 | Dong Wu (吴栋)          | Shanghai Institute of Optics and Fine Mechanics, CAS, china             | Bright Gamma-ray Burst by Ultra Strong Laser Solid Interactions: The Role of Bremsstrahlung and Radiation Reactions                 |                              |  |
|                                | 16:00-16:15 | <b>Coffee Break</b>   |   |   |                              |  |
| IV-2: Laser Plasma Interaction | 16:15-16:40 | John Marozas          | Laboratory for Laser Energetics, University of Rochester, USA           | <b>invited talk:</b> Wavelength Detuning Cross-Beam Energy Transfer Mitigation Scheme for Polar Direct Drive on SG-III              | Chair:<br>Kunioki Mima       |  |
|                                | 16:40-17:05 | Björn Manuel Hegelich | University of Texas at Austin, USA                                      | <b>invited talk:</b> Ultrahigh Intensity Physics at the Center for Relativistic Laser Science                                       |                              |  |
|                                | 17:05-17:30 | Yan Yin (银燕)          | National University of Defense Technology, China                        | <b>invited talk:</b> Laser Hole-Boring Acceleration of Two Diamond-Like Carbon Foils for Copious Positron Production and Gamma-Rays |                              |  |
|                                | 17:30-17:45 | Wenpeng Wang (王文鹏)    | Shanghai Institute of Optics and Fine Mechanics, CAS, China             | Multi-stage Proton Acceleration Controlled by Double Beam Image Technique   |                              |  |



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|--|-------------|--------------------|---|--|--|
|  | 17:45-18:00 | Lihua Cao<br>(曹莉华) | Institute of Applied Physics and Computational Mathematics, China | Fast Electrons and Ka X-ray Produced by Laser Interactions with Structured Targets |  |
|  | 18:00-18:15 | Yue Yang<br>(杨月)   | Science and Technology on Plasma Physics Laboratory, China        | Concept Study of High-spatial-resolution CT with a Laser-based Hard X-ray Source   |  |

| Tuesday May 8th                |             |                     |  |   |                              |  |
|--------------------------------|-------------|---------------------|--|---|------------------------------|--|
| IV-3: Laser Plasma Interaction | 14:00-14:25 | Yutong Li<br>(李玉同)  | Institute of Physics, CAS, China                           | <b>invited talk:</b> Generation and Applications of >mJ Terahertz Radiation Driven by Relativistic Laser Pulses | Chair:<br>Stephan Neff       |  |
|                                | 14:25-14:50 | Gregory Vieux       | University of Strathclyde, UK                              | <b>invited talk:</b> A Laser Amplifier Based on Raman Amplification in Plasma                                   |                              |  |
|                                | 14:50-15:15 | Caterina Riconda    | LULI   | <b>invited talk:</b> High Intensity Lasers and Plasma Optics  |                              |  |
|                                | 15:15-15:30 | Weimin Wang (王伟民)   | Shanghai Institute of Physics, CAS, China                  | Theoretical and Experimental Studies on THz Radiation via Two-color Laser Scheme                                |                              |  |
|                                | 15:30-15:45 | Jinqing Yu<br>(余金清) | Peking University, China                                   | Ultra-brilliance Isolated Attosecond Gamma-ray Light Source from Nonlinear Compton Scattering                   |                              |  |
|                                | 15:45-16:00 | Lu Li (李路)          | Helmholtz Institute Jena, Germany                          | Attosecond Control and Temporal Characterization of Surface High Harmonics Generation                           |                              |  |
|                                | 16:00-16:15 | <b>Coffee Break</b> |  |   |                              |  |
| IV-4: Laser Plasma Interaction | 16:15-16:40 | Dino A. Jaroszynski | University of Strathclyde, UK                              | <b>invited talk:</b> Laser-Plasma Optical Elements, Accelerators, and Radiation Sources: New Tools for Science  | Chair:<br>Yutong Li<br>(李玉同) |  |
|                                | 16:40-17:05 | Stephan Neff        | Facility for Antiproton and Ion Research, Germany          | <b>invited talk:</b> High Energy Density Science at FAIR - Planned Experiments and Facilities                   |                              |  |
|                                | 17:05-17:20 | Feng Zhang<br>(张锋)  | Science and Technology on Plasma Physics Laboratory, China | Muon Generation, Detection and Acceleration in Laser Wakefield  |                              |  |
|                                | 17:20-17:35 | Chongjie Mo         | Peking University, China                                   | First-Principles Calculations of X-ray Thomson Scattering of Warm Dense Matter                                  |                              |  |

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|--|-------------|---------------------|---|---|--|
|  | 17:35-17:50 | Rong Yang<br>(杨容)   | Institute of Applied Physics and Computational Mathematics, China | Laser Ray Tracing Simulation on Three-dimensional Structured Grids            |  |
|  | 17:50-18:05 | Xiaohui Zhang (张晓辉) | Tsinghua University, China  | Electron Acceleration and Betatron Emission from ps Laser Plasma Interactions |  |

**Wednesday May 9th**

|                                |             |                   |  |  |                            |
|--------------------------------|-------------|-------------------|--|--|----------------------------|
| IV-5: Laser Plasma Interaction | 14:00-14:25 | Antonio C. Ting   | University of Maryland, USA                          | <b>invited talk:</b> Propagation and Modulation of Intense Short Laser Pulse in Near Critical Density Plasma   | Chair:<br>Caterina Riconda |
|                                | 14:25-14:50 | Bengt Eliasson    | University of Strathclyde, UK                        | <b>invited talk:</b> Vlasov Simulations of Wave-Wave and Wave-Particle Interactions in Plasma  |                            |
|                                | 14:50-15:15 | Han Wen           | University of California, Los Angeles, USA           | <b>Invited talk:</b> Petascale Kinetic Simulations of Laser Plasma Interactions Relevant to Inertial Fusion — Controlling Laser Plasma Interactions with Laser Bandwidth |                            |
|                                | 15:15-15:30 | Yaoyuan Liu (刘耀远) | University of Science and Technology of China, China | Analysis of Stimulated Scattering of the Outer Beam in Experiments on SG-III Facility  |                            |
|                                | 15:30-15:45 | Chen Lin (林晨)     | Peking University, China                             | A New Method of Measuring Magnetic and Electric Fields in a Tokamak Using a Laser-accelerated Ion-beam Trace Probe   |                            |
|                                | 15:45-16:00 | Tongpu Yu (余同普)   | National University of Defense Technology, China     | Ultra-bright Gamma-ray Emission and Dense Positron Production with PW Lasers   |                            |

**Thursday May 10th**

|                                |             |                  |   |  |                          |
|--------------------------------|-------------|------------------|---|--|--------------------------|
| IV-6: Laser Plasma Interaction | 14:00-14:25 | Robert Bingham   | Rutherford Appleton Laboratory, UK        | <b>invited talk:</b> Laser plasma parametric Instabilities   | Chair:<br>Chuansheng Liu |
|                                | 14:25-14:50 | Chuang Ren       | University of Rochester                   | <b>Invited talk:</b> Laser-plasma instabilities and hot electron generation in shock ignition            |                          |
|                                | 14:50-15:15 | Zhichao Li (李志超) | Laser Fusion Research Center, CAEP, China | <b>invited talk:</b> Exploration of located hohlraum-plasma evolution using Thomson scattering technique |                          |

|                                |             |                        |   |   |                          |  |
|--------------------------------|-------------|------------------------|---|---|--------------------------|--|
|                                | 15:15-15:30 | Yanqing Deng ( 邓彦卿 )   | Shanghai Jiao Tong University, China                              | Cavitation Structure Evolution During Ultra-intense Laser Near-critical Density Plasma Interaction                              |                          |  |
|                                | 15:30-15:45 | Chengzhuo Xiao ( 肖成卓 ) | Hunan University, China   | On the Hot-electron Generation Produced by Two-plasmon Decay and Stimulated Raman Scattering in Inhomogeneous                   |                          |  |
|                                | 15:45-16:00 | Jingxia Gong ( 公静霞 )   | Peking University, China  | The Propagation of Intense Laser and Particle Acceleration in Presence of External Magnetic Field                               |                          |  |
|                                | 16:00-16:15 | <b>Coffee Break</b>    |   |   |                          |  |
| IV-7: Laser Plasma Interaction | 16:15-16:40 | Chuansheng Liu         | University of Maryland, USA                                       | <b>invited talk:</b> Stimulated Raman Scattering: Convective and Absolute instabilities   | Chair:<br>Robert Bingham |  |
|                                | 16:40-17:05 | Dong Yang ( 杨冬 )       | Laser Fusion Research Center, CAEP, China                         | <b>invited talk:</b> Laser Plasma Instability in Indirect-Drive Inertial Confinement Fusion: From Shenguang-II to Shenguang-III |                          |  |
|                                | 17:05-17:20 | Liang Hao ( 郝亮 )       | Institute of Applied Physics and Computational Mathematics, China | Study of the Secondary Laser Plasma Instabilities in ICF with FLAME Code  |                          |  |
|                                | 17:20-17:35 | Jinlong Jiao ( 矫金龙 )   | National University of Defense Technology, China                  | Reduction of Crossing Beam Transferred Energy by Ion Transfer Effect  |                          |  |
|                                | 17:35-17:50 | Qing Wang ( 王清 )       | Peking University, China  | Stimulated Brillouin Scattering in Inhomogeneous Flowing Plasmas by Using Vlasov Simulations                                    |                          |  |
|                                | 17:50-18:05 | Kaiqiang Pan ( 潘凯强 )   | Laser Fusion Research Center, CAEP, China                         | The Coupling Between a Laser and a Pre-structured Target with an Arbitrary Structure Period                                     |                          |  |

## Poster

|                      |  |  |
|----------------------|--|--|
| Yanxia Wang (王艳霞)    | Peking University, China                             | Nonlinear transition from convective to absolute Raman instability with trapped electrons  |
| Zhiyi Xu             | Peking University, China                             | Ballistic Injection and acceleration of positrons in bubble regime   |
| Hang Zhao (赵航)       | Laser Fusion Research Center, CAEP, China            | Background radiation analysis for optical Thomson scattering from laser-produced hohlraum plasmas on SG-III prototype laser facility |
| Qian Zhao (赵前)       | Shanghai Jiao Tong University, China                 | Laser-plasma optics and acceleration under high magnetic field   |
| Dongning Yue         | Shanghai Jiao Tong University, China                 | Generation and dynamics of relativistic electron vortex in laser near critical density plasma interaction                            |
| Changwang Lian (练昌旺) | University of Science and Technology of China, China | Laser Plasma Instabilities at Large-Angle Oblique Laser Incidence  |
| Xiangbin Wang (王向兵)  | University of Science and Technology of China, China | Gamma-ray generation in laser-irradiated solids with different pre-plasma scale length   |
| Yao Zhao (赵耀)        | Shanghai Jiao Tong University, China                 | Effective suppression of parametric instabilities with decoupled broadband lasers in plasma  |
| Rui Cheng            | Institute of Modern Physics, CAS, China              | Ion-plasma interaction experimental setup for plasma wave-field investigation  |
| Deyao Yu(余德尧)        | National University of Defense Technology, China     | Relativistic high-order-mode laser pulse generation from plasma waveguides   |
| Wei Qi (齐伟)          | Laser Fusion Research Center, CAEP, China            | Laser induced photoneutron source  |

**( III ) Satellite workshop on laser and plasma instabilities, ICMRE2018 May 6th Afternoon**

| <b>Chair: Lihua Cao</b> |             |                     |   |   |
|-------------------------|-------------|---------------------|---|---|
| 1                       | 15:00-15:15 | Chuansheng Liu      | University of Maryland, USA                                     | Stimulated Raman backscattering : Convective (C)and Absolute (A ) instabilities : Nonlinear transformation from ( C) to (A)and consequences of Reflection Enhancement ( Inflation) to Laser fusion. |
| 2                       | 15:15-15:30 | Stefan Weber        | Institute of Physics, Czech Academy of Sciences, Czech Republic | Non-local radiation hydrodynamics and laser absorption in the context of direct-drive ICF   |
| 3                       | 15:30-15:45 | Rafael Ramis        | Polytechnic University of Madrid, Spain                         | Current Improvement in the Computer Code MULTI  |
| 4                       | 15:45-16:00 | Vladimir Tikhonchuk | University of Bordeaux, France                                  | The role of hot electrons in the dynamics of a laser-driven strong converging shock   |
| 5                       | 16:00-16:15 | Victor Malka        | Centre National de Larecherche Scientifique, France             | On the use of gas target for laser plasma interaction   |

**( II ) Satellite workshop on advanced diagnostics technique for HEDP, ICMRE2018 May 9th Afternoon**

| <b>Chair: Feng Wang</b> |             |                        |  |  |
|-------------------------|-------------|------------------------|--|--|
| 1                       | 16:15-16:30 | Dimitri Batani         | Univeristy of Bordeaux, CELIA,France               | Physics of shock ignition and approach to ICF  |
| 2                       | 16:30-16:45 | Sergey A. Pikuz        | Joint Institute for High Temperature, Russia       | Hollow atom spectroscopy to study radiation dominated matter   |
| 3                       | 16:45-17:00 | Hyun-KyungChung        | Gwangju Institute of Science and Technology, Korea | atomic processes and spectroscopy modeling of plasmas  |
| 4                       | 17:00-17:15 | Xufei Xie ( 谢旭飞 )      | Laser Fusion Research Center, CAEP, China          | Measurement of the Radiation Flux from the Capsule within a Cylindrical Hohlraum at the SGIII-prototype Facility |
| 5                       | 17:15-17:30 | Zhongjing Chen ( 陈忠靖 ) | Laser Fusion Research Center, CAEP, China          | Ion temperature measurements in polar and equator directions at the SG-III laser facility                        |

**( IV ) Satellite workshop on laser fusion and science, ICMRE2018 May 9th Afternoon**

| <b>Chair: Weimin Zhou</b> |             |                        |  |  |
|---------------------------|-------------|------------------------|--|--|
| 1                         | 16:15-16:30 | Kunioki Mima           | The Graduate School for the Creation of New Photonics Industries | High Energy Electron Transport and Heating in Magnetized Fast Ignition |
| 2                         | 16:30-16:45 | Stefano Atzeni         | Univeristy of Rome   | Numerical Simulation of exploding pusher targets                       |
| 3                         | 16:45-17:00 | Masakatsu Murakami     | Institute of Laser Engineering, Osaka University                 | Internal Capsule Defects Quenching Thermonuclear Ignition in ICF       |
| 4                         | 17:00-17:15 | José Javier Honrubia   | Polytechnic University of Madrid                                 | Electron and ion fast ignition: Present status and perspectives        |
| 5                         | 17:15-17:30 | Lianqiang Shan ( 单连强 ) | Laser Fusion Research Center, CAEP, China                        | Kinetic effect of plasma interaction in ICF hohlraum                   |
| 6                         | 17:30-17:45 | Hongjie Liu ( 刘红杰 )    | Laser Fusion Research Center, CAEP, China                        | Liquid Scintillator Neutron Detection System and Transient Dosimeter   |

**Satellite workshop on fluid interface instability at extreme  
Sunday, May 6, 2018**

| <b>Session Chair: Ke Lan</b> |  |
|------------------------------|--|
| 08:30-09:00                  | <a href="#">Fluctuating Hydrodynamics Simulations of the Richtmyer-Meshkov Instability</a> |
|                              | Ravi Samtaney  |
| 09:00-09:30                  | <a href="#">On Converging Shock and Converging Richtmyer-Meshkov Instability</a>           |
|                              | Xisheng Luo  |

|                                   |   |
|-----------------------------------|---|
| 9:30-09:50                        | Studies of High-Energy-Density Hydrodynamics at Laser Fusion Research Center                                    |
|                                   | Yudong Pu   |
| 09:50-10:10                       | Coffee break  |
| <b>Session Chair: Baolin Tian</b> |   |
| 10:10-10:40                       | A nonlinear theory for spikes and bubbles at Richtmyer-Meshkov unstable interfaces with arbitrary density ratio |
|                                   | Qiang Zhang   |
| 10:40-11:10                       | Particle Jetting Instability  |
|                                   | Kun Xue   |
| 11:10-11:30                       | Dynamical Behavior of the Richtmyer–Meshkov Instability-Induced Turbulent Mixing                                |
|                                   | Tao Wang  |
| 11:30-11:50                       | Self-generated Magnetic Field Induced by Richtmyer-Meshkov Instability in Inertial Confinement Fusion Plasmas   |
|                                   | Yaqun Yu  |
| 11:50-14:00                       | Break   |
| <b>Session Chair: Xisheng Luo</b> |   |
| 14:00-14:30                       | Recent Advances in our Understanding of the Rayleigh-Taylor Instability   |
|                                   | Praveen Ramaprabhu  |
| 14:30-15:00                       | Structure and Dynamics of Plasma Interfaces in Laser-Driven Hohlräume   |
|                                   | Chikang Li  |
| 15:00-15:20                       | Dynamics Evolution of Chaotic Rayleigh-Taylor Bubble Fronts   |
|                                   | Yousheng Zhang  |

|                               |  |
|-------------------------------|--|
| 15:20-15:40                   | Coffee break   |
| <b>Session Chair: Kun Xue</b> |  |
| 15:40-16:10                   | An Approximate Deconvolution-kinematic Simulation (AD-KS) Subgrid Scale Model for LES of Lagrangian Relative Dispersion          |
|                               | Guodong Jin  |
| 16:10-16:30                   | High Order Consistent Finite Difference Algorithm for multi-Material Interfacial Instabilities Problems under Extreme Conditions |
|                               | Zhiwei He  |