ICMRE2022 Detailed Program

June 7, 2022

Opening and Award Ceremony

Beijing Time 20:00-20:05, Paris Time 14:00-14:05, EDT 8:00-8:05
Moderator: Michel Koenig

Opening Ceremony

Beijing Time 20:05-20:15, Paris Time 14:05-14:15, EDT 8:05-8:15
Moderator: Dieter Hoffmann

Best Paper Award Ceremony

Beijing Time 20:15-20:30, Paris Time 14:15-14:30, EDT 8:15-8:30
Moderator: Dieter Hoffmann

Young Scientist Award Ceremony

Plenary Session

Plenary talk 1: Beijing Time 20:30-21:20, Paris Time 14:30-15:20, EDT 8:30-9:20
Moderator: Michel Koenig

Jianbo Hu, Institute of Fluid Physics, China Academy of Engineering Physics, China

"Shock-induced phase transitions: from macroscopic to microscopic point of view"

Plenary talk 2: Beijing Time 21:20-22:10, Paris Time 15:20-16:10, EDT 9:20-10:10
Moderator: Michel Koenig

Christoph Keitel, Max-Planck Institute for Nuclear Physics in Heidelberg, Germany
"Extreme-field physics with electron beams, relativistic plasmas and strong laser pulses"

Plenary talk 3: Beijing Time 22:10-23:00, Paris Time 16:10-17:00, EDT 10:10-11:00
Moderator: Jean-Luc Miquel

Wanguo Zheng, Laser Fusion Research Center, China Academy of Engineering Physics, China

"Update on the Laser Driver for ICF"

Plenary talk 4: Beijing Time 23:00-23:50, Paris Time 17:00-17:50, EDT 11:00-11:50
Moderator: Jean-Luc Miquel

Dominik Kraus, University of Rostock, Germany
"Pressure effects on the electronic structure of carbon-hydrogen mixtures in the Mbar to Gbar regime"

June 8, 2022

Parallel session 1: Equation of State

Keynote speech 1: Beijing Time 20:00-20:40, Paris Time 14:00-14:40, EDT 8:00-8:40
Moderator: Wei Kang

Alessandra Ravasio, Laboratoire d'Utilisation des Lasers Intenses (LULI), CNRS, France

"Exploring metallic and superionic ammonia in ice giant interiors"

Invited talk 1-1: Beijing Time 20:40-21:10, Paris Time 14:40-15:10, EDT 8:40-9:10
Moderator: Wei Kang

Jiawei Xian, Institute of Applied Physics and Computational Mathematical, Beijing, China

"Phase diagram and equation of state for beryllium from ab initio molecular dynamics simulations"

Invited talk 1-2: Beijing Time 21:10-21:40, Paris Time 15:10-15:40, EDT 9:10-9:40
Moderator: Haifeng Liu

Kento Katagiri, Osaka University, Japan

"Hugoniot Equation-of-State of Polyimide up to 600 GPa"

Invited talk 1-3: Beijing Time 21:40-22:10, Paris Time 15:40-16:10, EDT 9:40-10:10
Moderator: Haifeng Liu

Wei Kang, Peking University, China

"Equation of state of hydrocarbon: How Close Between Theories and Experiments"

Invited talk 1-4: Beijing Time 22:10-22:40, Paris Time 16:10-16:40, EDT 10:10-10:40
Moderator: Haifeng Liu

Pavel Levashov, Joint Institute for High Temperatures RAS, Moscow, Russia

"Shock-wave experiments and phase diagrams for liquid metals: ab initio study"

Parallel session 2: High Pressure Science

Keynote Speech 2: Beijing Time 20:00-20:40, Paris Time 14:00-14:40, EDT 8:00-8:40
Moderator: Ho-Kwang Mao

Yanming Ma, State Key Laboratory of Superhard Materials, Jilin University, China

"Clathrate Superhydrides Stabilized at High Pressure: A Class of Conventional Superconductors that work at near room temperature"

Invited talk 2-1: Beijing Time 20:40-21:10, Paris Time 14:40-15:10, EDT 8:40-9:10

Moderator: Ho-Kwang Mao

Roberto Bini, University of Florence, UNIFI - Chemistry Department, Italy

"Steps forward in designing carbon nanothreads with tailored optical properties"

Invited talk 2-2: Beijing Time 21:10-21:40, Paris Time 15:10-15:40, EDT 9:10-9:40

Moderator: Kuo Li

Zhisheng Zhao, State Key Laboratory of Metastable Materials Science and Technology, Yanshan University, China

"Direct transformation mechanism from graphite to diamond"

Invited talk 2-3: Beijing Time 21:40-22:10, Paris Time 15:40-16:10, EDT 9:40-10:10

Moderator: Kuo Li

Viktor Struzhkin, Center for High Pressure Science and Technology Advanced Research, Shanghai, China & Geophysical Laboratory, Carnegie Institution of Washington, US

"Magnetic susceptibility studies in new hydride superconductors"

Invited talk 2-4: Beijing Time 22:10-22:40, Paris Time 16:10-16:40, EDT 10:10-10:40

Moderator: Kuo Li

Leonid Dubrovinsky University Bayreuth, Germany

Parallel session 3: Laser Plasma Interaction

Keynote Speech 3: Beijing Time 20:00-20:40, Paris Time 14:00-14:40, EDT 8:00-8:40

Moderator: Stefan Weber

Sylvie Depierreux, CEA, Paris, France

"Experiments Evidencing Stimulated Raman Scattering Increased by Multibeam Effects and Plasma Inhomogeneity"

Invited talk 3-1: Beijing Time 20:40-21:10, Paris Time 14:40-15:10, EDT 8:40-9:10

Moderator: Stefan Weber

Tony Arber, University of Warwick, UK

"Recent progress in modelling laser-plasma interactions for shock ignition"

Invited talk 3-2: Beijing Time 21:10-21:40, Paris Time 15:10-15:40, EDT 9:10-9:40

Moderator: Vladimir Tikhonchuk

Jason Myatt, Edmonton University, Canada

"The role of stimulated Raman side scattering indirectly-driven laser-plasma experiments"

Invited talk 3-3: Beijing Time 21:40-22:10, Paris Time 15:40-16:10, EDT 9:40-10:10
Moderator: Vladimir Tikhonchuk

Liang Hao, Institute of Applied Physics and Computational Mathematical, Beijing, China

"Investigation on collective stimulated Brillouin scattering with shared scattered light of two overlapping laser beams"

Invited talk 3-4: Beijing Time 22:10-22:40, Paris Time 16:10-16:40, EDT 10:10-10:40
Moderator: Vladimir Tikhonchuk

Kevin Glize, Shanghai Jiao Tong University, China

"Observation of the stimulated Raman side-scattering predominance in the compression stage of the Double-Cone Ignition Direct-Drive approach"

Parallel session 4: Laboratory Astrophysics

Keynote Speech 4: Beijing Time 20:00-20:40, Paris Time 14:00-14:40, EDT 8:00-8:40
Moderator: Michel Koenig

Frederico Fiuza, SLAC National Accelerator Laboratory, Stanford University, US

"Turbulent shocks and particle acceleration in the laboratory"

Invited talk 4-1: Beijing Time 20:40-21:10, Paris Time 14:40-15:10, EDT 8:40-9:10
Moderator: Michel Koenig

Florian Debras, IRAP, France

"Constraining the interior of giant planets with state-of-the-art equations-of-state of warm dense matter"

Invited talk 4-2: Beijing Time 21:10-21:40, Paris Time 15:10-15:40, EDT 9:10-9:40
Moderator: Alexis Casner

Jieru Ren, Xi'An Jiaotong University, China

"Laboratory generation and applications of uniform dense plasma"

Invited talk 4-3: Beijing Time 21:40-22:10, Paris Time 15:40-16:10, EDT 9:40-10:10
Moderator: Alexis Casner

Gabriel Rigon, Nagoya University, Japan

"A study of Rayleigh-Taylor instability and Supernova remnant from astrophysics to laboratory experiment"

Invited talk 4-4: Beijing Time 22:10-22:40, Paris Time 16:10-16:40, EDT 10:10-10:40
Moderator: Alexis Casner

Arno Vanthieghem, Princeton University, US
"Microturbulence in unmagnetized relativistic collisionless shock waves"

June 9, 2022

MRE Forum (Discussion on Next Generation Lasers for High Energy Density Science (HEDS))

Beijing Time 20:00-20:05, Paris Time 14:00-14:05, EDT 8:00-8:05
Moderator: David Crandall

Introduction to MRE Forum

Invited talk F-1: Beijing Time 20:05-20:20, Paris Time 14:05-14:20, EDT 8:05-8:20
Moderator: David Crandall

Robbie Scott, Central Laser Facility, UK
"Laser Driver Requirements for Inertial Fusion Energy"

Invited talk F-2: Beijing Time 20:20-20:35, Paris Time 14:20-14:35, EDT 8:20-8:35
Moderator: David Crandall

Todd Ditmire, University of Texas at Austin, US

Invited talk F-3: Beijing Time 20:35-20:50, Paris Time 4:35-14:50, EDT 8:35-8:50
Moderator: David Crandall

Ryosuke Kodama, Osaka University, Japan

Invited talk F-4: Beijing Time 20:50-21:05, Paris Time 14:50-15:05, EDT 8:50-9:05
Moderator: David Crandall

Yanqi Gao, Shanghai Institute of Laser Plasma, China **"Low-coherence KunWu laser facility and LPI Experiment on it"**

Beijing Time 21:05-21:35, Paris Time 15:05-15:35, EDT 9:05-9:35
Moderator: David Crandall and Ke Lan

Discussion