

Workshop on Plasma Physics with Intense Ion and Laser Beams

Report of Contributions

Contribution ID: 16

Type: **not specified**

Ion acceleration in intense laser fields

Friday, 21 November 2008 10:00 (30 minutes)

Presenter: SCHLEGEL, Th. (GSI)

Session Classification: Laser-matter interaction at relativistic intensities

Contribution ID: 17

Type: **not specified**

Relativistic electron-positron plasma and x-rays

Friday, 21 November 2008 10:30 (30 minutes)

Presenter: COWAN, Th. (FZ Dresden-Rossendorf, Institut für Strahlenphysik)

Session Classification: Laser-matter interaction at relativistic intensities

Contribution ID: 18

Type: **not specified**

Bright sources of radiation and high-energy electrons using gas, solid, and nano-structured targets irradiated by short intense laser pulses

Friday, 21 November 2008 11:30 (30 minutes)

Presenter: ANDREEV, N. (Joint Institute for High Temperature RAS, Moscow)

Session Classification: Laser-matter interaction at relativistic intensities

Contribution ID: 19

Type: **not specified**

Weibel instability of a relativistic electron beam in a quasi-neutral plasma

Friday, 21 November 2008 12:00 (30 minutes)

Presenter: KARMAKAR, A. (FZ Jülich, Supercomputing Centre)

Session Classification: Laser-matter interaction at relativistic intensities

Contribution ID: 20

Type: **not specified**

Slowing down of swift ions in strongly magnetized matter and in dense binary ionic mixtures

Friday, 21 November 2008 14:00 (30 minutes)

Presenter: DEUTSCH, C. (Université Paris-Sud, Laboratoire de Physique de Gaz et de Plasma)

Session Classification: Interaction of heavy ion beams with matter

Contribution ID: 21

Type: **not specified**

Laser-accelerated ions and interaction of swift ions with dense plasma

Friday, 21 November 2008 14:30 (30 minutes)

Presenter: BLAZEVIC, A. (GSI)

Session Classification: Interaction of heavy ion beams with matter

Contribution ID: 22

Type: **not specified**

Experimental and theoretical investigations of high-energy-density states in matter induced by intense heavy ion and laser beams

Friday, 21 November 2008 15:00 (30 minutes)

Presenter: LOMONOSOV, I. (Institute of Problems of Chemical Physics RAS)

Session Classification: Interaction of heavy ion beams with matter

Contribution ID: 23

Type: **not specified**

Status of HEDP research by intense heavy ion beams at GSI

Friday, 21 November 2008 15:30 (30 minutes)

Presenter: VARENTOV, D. (GSI)

Session Classification: Interaction of heavy ion beams with matter

Contribution ID: 24

Type: **not specified**

Theoretical investigations and experiments with PHELIX and intense heavy ion beams

Friday, 21 November 2008 16:20 (30 minutes)

Presenter: SHARKOV, B. (Moscow Institute of Theoretical and Experimental Physics)

Session Classification: Interaction of heavy ion beams with matter

Contribution ID: 26

Type: **not specified**

Joint signature of the Memorandum of Understanding between GSI Helmholtzzentrum für Schwerionenforschung GmbH, Extreme Matter Institute and Institution of the Russian Academy of Sciences: Joint Institute for High Temperature RAS

Friday, 21 November 2008 17:00 (10 minutes)

Session Classification: Joint signature of the Memorandum of Understanding

Contribution ID: 27

Type: **not specified**

Welcome by the Director of the ExtreMe Matter Institute EMMI

Friday, 21 November 2008 08:45 (5 minutes)

Presenter: BRAUN-MUNZINGER, P. (GSI, EMMI)

Session Classification: Welcome addresses

Contribution ID: 28

Type: **not specified**

Introductory remarks to the workshop by the Director of the Joint Institute for High Temperature RAS, Moscow

Friday, 21 November 2008 08:50 (10 minutes)

Presenter: FORTOV, V. (Joint Institute for High Temperature RAS)

Session Classification: Welcome addresses

Contribution ID: **30**

Type: **not specified**

PHELIX – Present performance and upgrades

Friday, 21 November 2008 09:00 (30 minutes)

Presenter: WITTE, K. (GSI)

Session Classification: PHELIX and its research potential

Contribution ID: 31

Type: **not specified**

Scientific program of the new division “Plasma Physics with Intense Ion and Laser Beams”

Friday, 21 November 2008 09:30 (30 minutes)

Presenter: KÜHL, Th. (GSI)

Session Classification: PHELIX and its research potential

Contribution ID: 32

Type: **not specified**

Applications of PHELIX-produced plasmas as a powerful source of x-ray photons and fast charged particles

Saturday, 22 November 2008 09:00 (30 minutes)

Presenter: SKOBELEV, I. (Joint Institute for High Temperature RAS, Moscow)

Session Classification: Diagnostics of high energy-density plasmas

Contribution ID: 33

Type: **not specified**

Future experiments on the laser interaction with nanostructures

Saturday, 22 November 2008 09:30 (30 minutes)

Presenter: ROSMEJ, O. (GSI)

Session Classification: Diagnostics of high energy-density plasmas

Contribution ID: 34

Type: **not specified**

Non-equilibrium phenomena, phase transitions, and non-ideal plasma under the action of short intense laser pulses: experiments and time-resolved diagnostics

Saturday, 22 November 2008 10:00 (30 minutes)

Presenter: ASHITKOV, S. (Institute of High Energy Density RAS)

Session Classification: Diagnostics of high energy-density plasmas

Contribution ID: 35

Type: **not specified**

X-ray scattering from warm dense matter/ strongly coupled plasmas

Saturday, 22 November 2008 10:30 (30 minutes)

Presenter: RILEY, D. (Queen's University Belfast, Centre for Plasma Physics)

Session Classification: Diagnostics of high energy-density plasmas

Contribution ID: 36

Type: **not specified**

Atomic physics in dense plasmas

Saturday, 22 November 2008 11:20 (30 minutes)

Presenter: ROSMEJ, F. (Université Pierre et Marie Curie – Paris VI, Groupe Physique Atomique des Plasmas Denses)

Session Classification: Diagnostics of high energy-density plasmas

Contribution ID: 37

Type: **not specified**

Multi-phase code development for the simulation of PHELIX experiments

Saturday, 22 November 2008 11:50 (30 minutes)

Presenter: POVARNITSYN, M. (Joint Institute for High Temperature RAS, Moscow)

Session Classification: Code development

Contribution ID: **38**

Type: **not specified**

Hydrodynamic simulations for extreme matter research

Saturday, 22 November 2008 12:20 (30 minutes)

Presenter: TAUSCHWITZ, A. (Universität Frankfurt, Theoretische Physik)

Session Classification: Code development

Contribution ID: 39

Type: **not specified**

Wide-range equations of state and radiative opacity of substances at high energy density

Saturday, 22 November 2008 14:00 (30 minutes)

Presenter: KHISHCHENKO, K. (Joint Institute for High Temperature RAS, Moscow)

Session Classification: Equation of State: Theory and measurements

Contribution ID: 40

Type: **not specified**

Thermodynamic and transport properties of warm dense hydrogen and deuterium based on first principle Direct-Path Integral Monte Carlo and Wigner dynamics approaches

Saturday, 22 November 2008 14:30 (30 minutes)

Presenter: LEVASHOV, P. (Joint Institute for High Temperature RAS, Moscow)

Session Classification: Equation of State: Theory and measurements

Contribution ID: 41

Type: **not specified**

Wide-range models for optical, transport, and thermodynamic properties of WDM and laser plasmas

Saturday, 22 November 2008 15:00 (30 minutes)

Presenter: VEYSMAN, M. (Joint Institute for High Temperature RAS, Moscow)

Session Classification: Equation of State: Theory and measurements

Contribution ID: 45

Type: **not specified**

Laser and Ion Beam Interaction with Matter

Saturday, 22 November 2008 15:30 (30 minutes)

Presenter: EFREMOV, V. (Joint Institute for High Temperatures)