

Plasma Physics with Intense Laser and Heavy Ion Beams

Report of Contributions

Contribution ID: 0

Type: **not specified**

New dimensions of the periodic system

Thursday, May 20, 2010 9:30 AM (30 minutes)

Presenter: GREINER, W. (FIAS, Frankfurt University)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 1

Type: **not specified**

Quantum simulations of thermodynamic and kinetic properties of strongly coupled quark-gluon plasmas

Thursday, May 20, 2010 10:00 AM (30 minutes)

Presenter: FILINOV, V. S. (JIHT RAS)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 2

Type: **not specified**

Exploring warm dense matter by innovative xuv and x-ray plasma spectroscopy

Thursday, May 20, 2010 10:30 AM (30 minutes)

Presenter: FÖRSTER, E. (LC Jena)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 3

Type: **not specified**

Generation of high energy electrons and x-rays under the action of short intense laser pulses: theory and experiment

Thursday, May 20, 2010 11:00 AM (30 minutes)

Presenter: ANDREEV, N. E. (JIHT RAS)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 4

Type: **not specified**

FAIR for plasma physics

Thursday, May 20, 2010 11:45 AM (30 minutes)

Presenter: SHARKOV, B. (FAIR, Darmstadt)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 5

Type: **not specified**

Scientific program of PHELIX-laser system at GSI-Darmstadt

Thursday, May 20, 2010 12:15 PM (30 minutes)

Presenter: KÜHL, T. (GSI, Darmstadt)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 6

Type: **not specified**

The velocity measurement of shocks generated by x-ray radiation in different materials at ISKRA 5 laser

Thursday, May 20, 2010 12:45 PM (30 minutes)

Presenter: ZHIDKOV, N. V. (RFNC-VNIIEF, Sarov)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 7

Type: **not specified**

Scientific activities and perspectives at TWAC

Thursday, May 20, 2010 2:15 PM (30 minutes)

Presenter: GOLUBEV, A. A. (ITEP, Moscow)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 8

Type: **not specified**

The PHELIX high energy laser facility

Thursday, May 20, 2010 2:45 PM (30 minutes)

Presenter: EISENBARTH, U. (GSI, Darmstadt)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 9

Type: **not specified**

Indirect heated low Z foams as plasma targets for crossing laser-heavy ion beam experiments at GSI-Darmstadt

Thursday, May 20, 2010 3:15 PM (30 minutes)

Presenter: ROSMEJ, O. (GSI, Darmstadt)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: **10**

Type: **not specified**

Numerical modeling of high-energy-density states in matter induced by intense heavy ion beams

Thursday, May 20, 2010 3:45 PM (30 minutes)

Presenter: LOMONOSOV, I. V. (ICP RAS, Chernogolovka)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 11

Type: **not specified**

K-alpha spectra from laser-produced solid-density plasmas

Thursday, May 20, 2010 4:30 PM (30 minutes)

Presenter: RÖPKE, G. (Rostock University)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 12

Type: **not specified**

Theoretical and experimental studies of radiative properties of substances and their applications to laser and heavy ion inertial fusion

Thursday, May 20, 2010 5:00 PM (30 minutes)

Presenter: ORLOV, N. Yu. (JIHT RAS)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 13

Type: **not specified**

Recording of tomographic image of direct illumination target at the iodine laser facility ISKRA 5

Thursday, May 20, 2010 5:30 PM (30 minutes)

Presenter: SUSLOV, N. A. (RFNC-VNIIEF, Sarov)

Session Classification: Current scientific programs of Russian and German Institutions

Contribution ID: 14

Type: **not specified**

Intense heavy ion and laser heating in resolution of uranium critical point location problem

Friday, May 21, 2010 10:00 AM (30 minutes)

Presenter: IOSILEVSKIY, I.L. (JIHT RAS)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 15

Type: **not specified**

Laser targets plus plasma diagnostics in the era of validation experiment

Friday, May 21, 2010 10:30 AM (30 minutes)

Presenter: BORISENKO, N. G. (LPI RAS)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 16

Type: **not specified**

Parameter margins of hohlraum targets for ion-plasma interaction experiments

Friday, May 21, 2010 11:00 AM (30 minutes)

Presenter: BALDINA, E. (IAS Dubna University)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 17

Type: **not specified**

Plasma formation at the foam layer irradiation by soft x-ray radiation

Friday, May 21, 2010 11:30 AM (30 minutes)

Presenter: VERGUNOVA, G. A. (LPI RAS)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 18

Type: **not specified**

Quantum dynamics in strong laser fields: acceleration, ionization and pair creation processes

Friday, May 21, 2010 12:00 PM (30 minutes)

Presenter: HARMAN, Z. (JIHT RAS)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 19

Type: **not specified**

Relativistic laser beam propagation, critical density increase and generation of hot dense matter Plasma formation at the foam layer irradiation by soft x-ray radiation

Friday, May 21, 2010 12:30 PM (30 minutes)

Presenter: WENG, S. M. (TU Darmstadt)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 20

Type: **not specified**

Electron-phonon interaction in metals under nonequilibrium excitations of the electron subsystem

Friday, May 21, 2010 1:00 PM (30 minutes)

Presenter: SERGEEV, O.V. (JIHT RAS)

Session Classification: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 21

Type: **not specified**

Numerical studies of ultra-short laser interactions: application for nanotechnology

Friday, May 21, 2010 2:30 PM (30 minutes)

Presenter: ITINA, T. E. (JIHT RAS)

Session Classification: Current activities in the intense laser and ion beams interaction with matter

Contribution ID: 22

Type: **not specified**

On the enhancement of characteristic x-ray emission from a target covered with spherical clusters irradiated by a femtosecond laser pulse Presentation

Friday, May 21, 2010 3:00 PM (20 minutes)

Presenter: KOSTENKO, O. F. (JIHT RAS)

Session Classification: Current activities in the intense laser and ion beams interaction with matter

Contribution ID: 23

Type: **not specified**

Simulation of absorption of femtosecond laser pulses in copper

Friday, May 21, 2010 3:20 PM (30 minutes)

Presenter: SHADRIN, A. A. (RFNC-VNIITF, Snezhinsk)

Session Classification: Current activities in the intense laser and ion beams interaction with matter

Contribution ID: 24

Type: **not specified**

PIC simulations of laser irradiated mass limited targets

Friday, May 21, 2010 3:50 PM (30 minutes)

Presenter: KARMAKAR, A. (JSC, Jülich)

Session Classification: Current activities in the intense laser and ion beams interaction with matter

Contribution ID: 25

Type: **not specified**

Development of electron-temperature-dependent interatomic potential for atomistic simulation of laser ablation of gold

Friday, May 21, 2010 4:30 PM (20 minutes)

Presenter: STARIKOV, S. V. (JIHT RAS)

Session Classification: Current activities in the intense laser and ion beams interaction with matter

Contribution ID: 26

Type: **not specified**

Ablation by optical and x-ray lasers

Friday, May 21, 2010 4:50 PM (20 minutes)

Presenter: PETROV, Yu. V. (ITP RAS, Chernogolovka)

Session Classification: Current activities in the intense laser and ion beams interaction with matter

Contribution ID: 27

Type: **not specified**

Fundamental short time-scale relativistic physics: Collective phenomena. Particle acceleration and production in femtosecond laser-matter interaction

Friday, May 21, 2010 5:10 PM (20 minutes)

Presenter: BALDIN, A. A. (JINR, Dubna)

Session Classification: Current activities in the intense laser and ion beams interaction with matter