

Plasma Physics with Intense Laser and Heavy Ion Beams

Report of Contributions

Contribution ID: 0

Type: **not specified**

Overview of plasma physics and atomic physics activities at GSI

Thursday, May 14, 2009 9:30 AM (30 minutes)

Presenter: STÖHLKER, Thomas (GSI)

Session Classification: Session 1. Fundamental processes under the action of intense laser and ion beams

Contribution ID: 1

Type: **not specified**

EOS of strongly coupled quark-gluon plasma. Path-integral Monte Carlo simulations

Thursday, May 14, 2009 10:00 AM (30 minutes)

Presenter: FILINOV, Vladimir S. (JIHT RAS)

Session Classification: Session 1. Fundamental processes under the action of intense laser and ion beams

Contribution ID: 2

Type: **not specified**

Investigation of equations of state and phase transitions of substances at high energy densities with PHELIX

Thursday, May 14, 2009 10:30 AM (30 minutes)

Presenter: KHISHCHENKO, Konstantiv V. (JIHT RAS)

Session Classification: Session 1. Fundamental processes under the action of intense laser and ion beams

Contribution ID: 3

Type: **not specified**

Secondary sources generated by short intense laser pulses: high energy particles and radiation

Thursday, May 14, 2009 11:00 AM (30 minutes)

Presenter: ANDREEV, Nikolay E. (JIHT RAS)

Session Classification: Session 1. Fundamental processes under the action of intense laser and ion beams

Contribution ID: 4

Type: **not specified**

Current performance of the PHELIX facility and experimental outlook for 2009-2010

Thursday, May 14, 2009 11:45 AM (30 minutes)

Presenter: BAGNOUD, Vincent (GSI)

Session Classification: Session 2. Current scientific programs at EMMI, JIHT and GSI

Contribution ID: 5

Type: **not specified**

Beam time situation at GSI

Thursday, May 14, 2009 12:15 PM (10 minutes)

Presenter: TAUSCHWITZ, Andreas (GSI)

Session Classification: Session 2. Current scientific programs at EMMI, JIHT and GSI

Contribution ID: 6

Type: **not specified**

Hydrodynamic simulations for plasma physics experiments at GSI

Thursday, May 14, 2009 12:25 PM (20 minutes)

Presenter: TAUSCHWITZ, Anna (EMMI, Frankfurt University)

Session Classification: Session 2. Current scientific programs at EMMI, JIHT and GSI

Contribution ID: 7

Type: **not specified**

Investigation of the dynamics of rear side spallation in metallic films by PHELIX ultra short laser pulses

Thursday, May 14, 2009 12:45 PM (30 minutes)

Presenter: SITNIKOV, Dimitriy S. (JIHT RAS)

Session Classification: Session 2. Current scientific programs at EMMI, JIHT and GSI

Contribution ID: 8

Type: **not specified**

Problems in case of optical measurement of dense plasma heating in laser shock-wave compression

Thursday, May 14, 2009 2:30 PM (20 minutes)

Presenter: KRASYUK, Igor K. (GPI, JIHT RAS)

Session Classification: Session 3: Current scientific programs at JIHT, ITEP and GSI

Contribution ID: 9

Type: **not specified**

ITEP activities in physics of intense ion and laser beams

Thursday, May 14, 2009 3:00 PM (30 minutes)

Presenter: GOLUBEV, Alexander (ITEP)

Session Classification: Session 3: Current scientific programs at JIHT, ITEP and GSI

Contribution ID: **10**

Type: **not specified**

Nanostructures irradiated by ns and ps PHELIX-laser pulses

Thursday, May 14, 2009 3:30 PM (30 minutes)

Presenter: ROSMEJ, Olga (GSI)

Session Classification: Session 3: Current scientific programs at JIHT, ITEP and GSI

Contribution ID: 11

Type: **not specified**

Investigation of warm dense plasma with PHELIX

Thursday, May 14, 2009 4:00 PM (30 minutes)

Presenter: PIKUZJR., Sergey A. (JIHT RAS)

Session Classification: Session 3: Current scientific programs at JIHT, ITEP and GSI

Contribution ID: 12

Type: **not specified**

X-ray diagnostics of laser produced warm-dense plasmas

Thursday, May 14, 2009 4:45 PM (30 minutes)

Presenter: NEUMAYER, Paul (EMMI GSI)

Session Classification: Session 4: Current scientific programs at JIHT and EMMI

Contribution ID: 13

Type: **not specified**

Investigation of gas dynamics, photon transport processes, equation of state and radiative opacity of substances at high energy densities for PHELIX experiments

Thursday, May 14, 2009 5:15 PM (30 minutes)

Presenter: ORLOV, Nikolay Yu. (JIHT RAS)

Session Classification: Session 4: Current scientific programs at JIHT and EMMI

Contribution ID: 14

Type: **not specified**

Investigation of fast ions generated in laser-produced plasma heated by PHELIX and their interaction with solids and aerogel targets

Thursday, May 14, 2009 5:45 PM (30 minutes)

Presenter: SKOBELEV, Igor Yu. (JIHT RAS)

Session Classification: Session 4: Current scientific programs at JIHT and EMMI

Contribution ID: 15

Type: **not specified**

Non-congruent phase transitions in cosmic matter and laboratory

Friday, May 15, 2009 11:00 AM (30 minutes)

Presenter: IOSILEVSKIY, Igor L. (JIHT RAS)

Session Classification: Session 5: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 16

Type: **not specified**

Target aspects in plasma experiments with laser and heavy ion beams

Friday, May 15, 2009 11:30 AM (30 minutes)

Presenter: BORISENKO, Nataliya G. (LPI RAS)

Session Classification: Session 5: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 17

Type: **not specified**

Subcritical pair production by high-intensity lasers

Friday, May 15, 2009 12:00 PM (30 minutes)

Presenter: BLASCHKE, David B. (JINR, Dubna)

Session Classification: Session 5: Fundamental processes under the action of intense laser and ion beams

Contribution ID: **18**

Type: **not specified**

High-energy processes in super-strong laser fields

Friday, May 15, 2009 12:30 PM (30 minutes)

Presenter: HATSAGORTSYAN, Karen Z. (Max-Planck Institute, Heidelberg)

Session Classification: Session 5: Fundamental processes under the action of intense laser and ion beams

Contribution ID: 19

Type: **not specified**

Generation of X-rays and fast particles under the action of intense laser pulses upon the nanostructures

Friday, May 15, 2009 2:20 PM (20 minutes)

Presenter: KOSTENKO, Oleg F. (JIHT RAS)

Session Classification: Session 6: Current activities in intense laser and ion beams interaction with matter

Contribution ID: 20

Type: **not specified**

The results of first experiments on PHELIX laser beam interaction with nanostructure targets

Friday, May 15, 2009 2:40 PM (20 minutes)

Presenter: KAZAKOV, Evgeny D. (Kurcharov Research Center)

Session Classification: Session 6: Current activities in intense laser and ion beams interaction with matter

Contribution ID: 21

Type: **not specified**

Multiphase code development for the simulation of PHELIX experiments

Friday, May 15, 2009 3:00 PM (20 minutes)

Presenter: POVARNITSYN, Mikhail E. (JIHT RAS)

Session Classification: Session 6: Current activities in intense laser and ion beams interaction with matter

Contribution ID: 22

Type: **not specified**

Femtosecond ablation: theory and experiment

Friday, May 15, 2009 3:20 PM (20 minutes)

Presenter: PETROV, Yury V. (ITP RAS)

Session Classification: Session 6: Current activities in intense laser and ion beams interaction with matter