

Workshop on High Energy Density Physics with BELLA-i

Report of Contributions

Contribution ID: 0

Type: **not specified**

Welcome

Wednesday, January 20, 2016 8:35 AM (10 minutes)

Presenter: Dr LEEMANS, Wim

Contribution ID: 1

Type: **not specified**

Overview of the BELLA Center and our vision for BELLA-i, W. Leemans and T. Schenkel

Wednesday, January 20, 2016 8:45 AM (35 minutes)

Presenter: SCHENKEL, Thomas

Contribution ID: 2

Type: **not specified**

BELLA-i - a new tool for ion acceleration, rel. plasma physics and applications, M. Roth

Wednesday, January 20, 2016 9:20 AM (35 minutes)

Contribution ID: 3

Type: **not specified**

discussion

Contribution ID: 4

Type: **not specified**

discussion

Contribution ID: 5

Type: **not specified**

Laser ion acceleration at the centre for advanced laser applications in Munich, J. Schreiber

Wednesday, January 20, 2016 10:15 AM (35 minutes)

Contribution ID: 6

Type: **not specified**

Acceleration of ions using ultra-thin targets with the BELLA laser, F. Beg

Wednesday, January 20, 2016 10:50 AM (35 minutes)

Contribution ID: 7

Type: **not specified**

Chirped standing wave acceleration: High-energy ion control, F. Mackenroth

Wednesday, January 20, 2016 11:25 AM (20 minutes)

Contribution ID: 8

Type: **not specified**

discussion

Contribution ID: 9

Type: **not specified**

**summary discussion working group 1 laser-ion
acceleration and start of working group 2: radiation
generation and warm dense matter, discussion
leaders: F. Albert, J. van Tilborg**

Contribution ID: 10

Type: **not specified**

Betatron x-rays from laser-wakefield accelerators: a novel probe for time-resolved high energy density science experiments, F. Albert

Wednesday, January 20, 2016 1:00 PM (35 minutes)

Contribution ID: 11

Type: **not specified**

**working group 1: laser-ion acceleration, discssion
leaders: M. Hegelich, S. Steinke**

Contribution ID: 12

Type: **not specified**

Potential for high intensity QED experiments on Bella, M. Zepf

Wednesday, January 20, 2016 1:35 PM (30 minutes)

Contribution ID: 13

Type: **not specified**

Resolving ultrafast dynamics in warm dense matter, D. Kraus

Thursday, January 21, 2016 11:25 AM (35 minutes)

Contribution ID: 14

Type: **not specified**

Exploiting lights momentum to boost laser wakefield accelerators towards high field physics, J. Vieira

Wednesday, January 20, 2016 11:45 AM (20 minutes)

Contribution ID: 15

Type: **not specified**

Discussion of Day 1 experiments at BELLA-i

Wednesday, January 20, 2016 3:50 PM (1h 10m)

Contribution ID: 16

Type: **not specified**

discussion; intro working group 3, ultra-high field physics, nQED, nuclear-plasma, discussion leaders: J. Wurtele, S. Bulanov

Contribution ID: 17

Type: **not specified**

Dense Gamma-ray and Pair Creation using Ultra-intense Lasers, E. Liang

Thursday, January 21, 2016 9:20 AM (35 minutes)

Contribution ID: **18**

Type: **not specified**

Why does a quantum field theory for intense laser matter interactions matter?, B. M. Hegelich

Thursday, January 21, 2016 9:55 AM (35 minutes)

Contribution ID: **19**

Type: **not specified**

discussion

Contribution ID: 20

Type: **not specified**

All Optical Nonlinear Compton Scattering and Pair-Plasma Production, A. Thomas

Thursday, January 21, 2016 10:50 AM (35 minutes)

Contribution ID: 21

Type: **not specified**

Ionization physics at extreme intensity, D. Gordon

Wednesday, January 20, 2016 2:05 PM (20 minutes)

Contribution ID: 22

Type: **not specified**

discussion

Contribution ID: 23

Type: **not specified**

QED-driven absorption of high-intensity lasers, T. Blackburn

Thursday, January 21, 2016 2:10 PM (20 minutes)

Contribution ID: 24

Type: **not specified**

Nuclear-Plasma Experiments using Lasers, L. Bernstein

Thursday, January 21, 2016 1:00 PM (35 minutes)

Contribution ID: 25

Type: **not specified**

Laser-nucleus interaction with keV and MeV photons, J. Gunst

Thursday, January 21, 2016 1:35 PM (35 minutes)

Contribution ID: 26

Type: **not specified**

discussion

Contribution ID: 27

Type: **not specified**

From electron-Positron photoproduction in strong laser fields to QED cascades, S. Meuren

Thursday, January 21, 2016 2:30 PM (35 minutes)

Workshop on Hi... / Report of Contributions

TBD

Contribution ID: **28**

Type: **not specified**

TBD

Contribution ID: 29

Type: **not specified**

Discussion of requirements for experiments at BELLA-i

Thursday, January 21, 2016 3:50 PM (1h 10m)

Contribution ID: 30

Type: **not specified**

**intro working group 3: facilities, beamlines, targetry,
discussion leaders: R. Shephard, W. Leemans**

Contribution ID: 31

Type: **not specified**

Relativistic electron transport in HED plasmas – future prospects at XFELs, T. Cowan

Wednesday, January 20, 2016 2:55 PM (35 minutes)

Contribution ID: **32**

Type: **not specified**

no host lunch

Friday, January 22, 2016 12:00 PM (1 hour)

Contribution ID: 33

Type: **not specified**

Liquid crystal films as plasma mirrors and targets for high repetition rate secondary beam generation, P. Poole

Friday, January 22, 2016 8:40 AM (35 minutes)

Contribution ID: **34**

Type: **not specified**

discussion

Contribution ID: 35

Type: **not specified**

Status of the ELI-MED beamline, V. Scuderi

Friday, January 22, 2016 9:35 AM (35 minutes)

Contribution ID: 36

Type: **not specified**

optional tours of the BELLA center and other LBNL facilities

Friday, January 22, 2016 1:00 PM (1 hour)

Contribution ID: 37

Type: **not specified**

wrap up discussion, what are 1st experiments, next steps, ...

Contribution ID: **38**

Type: **not specified**

no host dinner, some of us will go to Jupiter 2181 Shattuck Ave

Wednesday, January 20, 2016 6:30 PM (30 minutes)

Contribution ID: 39

Type: **not specified**

**no host dinner, China Village, \$30 per person, please
RSVP to gtjiles@lbl.gov**

Thursday, January 21, 2016 6:30 PM (30 minutes)

Contribution ID: 40

Type: **not specified**

A perspective on laser-driven ion acceleration: new mechanisms and their dependence on laser-pulse duration, J. Fernandez

Thursday, January 21, 2016 8:45 AM (35 minutes)

Contribution ID: 41

Type: **not specified**

Integrating a high-power laser system into the accelerator infrastructure at DESY, A. Meier

Friday, January 22, 2016 9:15 AM (20 minutes)

Contribution ID: 42

Type: **not specified**

Exploiting relativistic nonlinearities in near-critical density plasmas for laser driven ion acceleration, J. Bin

Wednesday, January 20, 2016 3:30 PM (20 minutes)

Contribution ID: 43

Type: **not specified**

What can we learn about electron velocity distribution functions by Raman amplifying a probe beam off a sub-ps time scale sculpted pump wave using STUD pulses (spike trains of uneven duration and delay) in a high energy density plasma?, B. Afeyan

Thursday, January 21, 2016 3:30 PM (20 minutes)

Contribution ID: 44

Type: **not specified**

BELLA-i ion beam transport, Q. Ji

Friday, January 22, 2016 10:30 AM (20 minutes)