# Laser Applications at Accelerators Conference 2015



### **Report of Contributions**

Contribution ID: 0 Type: not specified

#### **Welcome / Admin & Logistics**

Wednesday 25 March 2015 09:00 (10 minutes)

**Presenter:** ASHWORTH, Rob (University of Liverpool)

Contribution ID: 1 Type: not specified

#### Lasers and Accelerators as Drivers for Innovation

Wednesday 25 March 2015 09:10 (20 minutes)

**Presenter:** WELSCH, Carsten (Cockcroft Institute / University of Liverpool)

Contribution ID: 2 Type: not specified

### Session 1. Particle Beam Generation: Laser Ion Sources

Wednesday 25 March 2015 09:30 (30 minutes)

**Presenter:** FERRER, Rafael (KU Leuven)

Contribution ID: 3 Type: not specified

## Optimal ionization schemes for the dual dye - Ti:Sa laser system of RILIS at ISOLDE

Wednesday 25 March 2015 10:00 (15 minutes)

**Presenter:** DAY GOODACRE, Thomas (CERN)

Contribution ID: 4 Type: **not specified** 

### An ultra-cold electron source from an alternating current Magneto-Optical Trap (AC-MOT)

Wednesday 25 March 2015 10:15 (15 minutes)

**Presenter:** JONES, Michael (THE UNIVERSITY OF MANCHESTER)

Contribution ID: 5 Type: **not specified** 

#### **Integration of RILIS @ SPIRAL2 TISS**

Wednesday 25 March 2015 10:30 (15 minutes)

**Presenter:** HENARES, Jose Luis (GANIL)

Contribution ID: 6 Type: not specified

#### Development of the Ti:Sa laser system for REGLIS

Wednesday 25 March 2015 10:45 (15 minutes)

Presenter: HIJAZI, Lara (GANIL)

Photo Injectors

Contribution ID: 7 Type: **not specified** 

#### **Photo Injectors**

Wednesday 25 March 2015 11:30 (30 minutes)

**Presenter:** JONES, Lee (ASTeC - STFC)

Contribution ID: 8 Type: **not specified** 

### Photo cathodes sensitive to visible laser beams for photoinjector applications

Wednesday 25 March 2015 12:00 (15 minutes)

**Presenter:** MARTINI, Irene (CERN)

Contribution ID: 9 Type: not specified

## Study of laser shaping using Digital Micro-mirror-array device

Wednesday 25 March 2015 12:15 (15 minutes)

**Presenter:** ZHANG, Hao (University of Liverpool)

Contribution ID: 10 Type: not specified

#### High brightness SRF photo injector at ELBE

Wednesday 25 March 2015 12:30 (15 minutes)

**Presenter:** LU, Pengnan (HZDR)

Contribution ID: 11 Type: not specified

#### Session 2. Laser-based ion acceleration

Wednesday 25 March 2015 15:30 (30 minutes)

**Presenter:** SCHREIBER, Jörg (LMU)

Contribution ID: 12 Type: not specified

#### Photocathodes for high-brightness photoinjectors

Wednesday 25 March 2015 14:45 (15 minutes)

**Presenters:** TEICHERT, Jochen (Helmholtz-Zentrum Dresden-Rossendorf); XIANG, Rong (Helmholtz-Zentrum Dresden-Rossendorf)

Contribution ID: 13 Type: not specified

## Investigations into laser-driven ion acceleration with ultrathin targets

Wednesday 25 March 2015 16:30 (15 minutes)

**Presenter:** STOCKHAUSEN, Luca Christopher (C)

Contribution ID: 14 Type: not specified

### Laser control and distributed data acquisition for 'in-source'laser spectroscopy at CERN-ISOLDE

Wednesday 25 March 2015 14:30 (15 minutes)

Presenter: ROSSEL, Ralf (Johannes-Gutenberg-Universitaet Mainz (DE))

Contribution ID: 15 Type: not specified

#### **Session 3. Electron acceleration**

Thursday 26 March 2015 09:15 (30 minutes)

State of the art in electron beam laser acceleration

**Presenter:** PUKHOV, Alexander (University of Dusseldorf)

Contribution ID: 16 Type: not specified

## The Status of the Southern Europe Thomson Source for Applied Research

Thursday 26 March 2015 10:00 (15 minutes)

**Presenter:** PALMER, Dennis (INFN-Milano)

Contribution ID: 17 Type: not specified

#### **Targetry for Laser Wakefield Acceleration**

Thursday 26 March 2015 09:45 (15 minutes)

Presenter: COUPERUS, Jurjen

Contribution ID: 18 Type: not specified

#### **Diagnostic Tools for Plasma-Electron Accelerators**

Thursday 26 March 2015 10:15 (30 minutes)

**Presenter:** KALUZA, Malte (University of Jena)

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Contributed talk

Contribution ID: 19 Type: not specified

#### **Contributed talk**

Contribution ID: 20 Type: not specified

### Femtosecond X-ray sources from laser-driven electron accelerators

Thursday 26 March 2015 10:45 (15 minutes)

**Presenter:** DÖPP, Andreas (Centro de Laseres Pulsados)

Contribution ID: 21 Type: not specified

### Developments towards Doppler-free in-source laser spectroscopy at ISOLDE RILIS

Wednesday 25 March 2015 15:15 (15 minutes)

**Presenter:** VEINHARD, Matthieu (CERN)

Contribution ID: 22 Type: not specified

#### **Dielectric Laser Acceleration**

Wednesday 25 March 2015 16:45 (30 minutes)

**Presenter:** HOMMELHOFF, Peter (U)

Contribution ID: 23 Type: not specified

### First results on Ge resonant laser photoionization in hollow cathode lamp

Wednesday 25 March 2015 15:00 (15 minutes)

**Presenter:** MARIOTTI, Emilio (Università di Siena –DSFTA)

Contribution ID: 24 Type: not specified

# Numerical optimization on dielectric laser-driven acceleration of electrons in a grating-based microstructure

Wednesday 25 March 2015 17:15 (15 minutes)

**Presenter:** WEI, Yelong (University of Liverpool)

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Contributed talk

Contribution ID: 25 Type: not specified

#### **Contributed talk**

Contribution ID: 26

Type: not specified

### Session 4. Industry applications: Applications at the Interface between Lasers and Accelerators

Thursday 26 March 2015 11:30 (30 minutes)

**Primary author:** Dr SYLLA, François (SourceLAB)

**Presenter:** Dr SYLLA, François (SourceLAB)

Contribution ID: 27 Type: not specified

### Developing the current experimental research into laser acceleration to a pre-commercial level

Thursday 26 March 2015 12:00 (15 minutes)

**Presenter:** KRÄMER, Jakob Matthias (Danfysik)

Contribution ID: 28 Type: not specified

## Novel laser-engineered surface structures (LESS) for electron cloud mitigation in accelerators

Thursday 26 March 2015 12:15 (15 minutes)

**Presenter:** GILLESPIE, Allan (Unversity of Dundee, Scotland, UK)

Contribution ID: 29 Type: not specified

### Computer-based modelling and experimental optimization of power supplies

Thursday 26 March 2015 12:30 (15 minutes)

**Presenter:** NOWACKI, Kamil (FOTON)

Contribution ID: 30 Type: not specified

## Neutron production from 2 stage nuclear reactions driven by TW laser-target interactions

Thursday 26 March 2015 16:30 (15 minutes)

**Presenter:** KISYOV, Stanimir (IFIN-HH)

Contribution ID: 31 Type: not specified

#### **Seminar: The Extreme Light Infrastructure**

Thursday 26 March 2015 16:45 (1 hour)

Seminar: The Extreme Light Infr $\,\cdots\,$ 

**Presenter:** GALES, Sydney (ELI)

Contribution ID: 32 Type: not specified

#### **Diagnostics at Free Electron Lasers**

Friday 27 March 2015 09:30 (30 minutes)

**Presenter:** KUBE, Gero (DESY)

Contribution ID: 33 Type: not specified

### Measurement of the longitudinal bunch shape with electro-optical techniques in an electron accelerator

Friday 27 March 2015 10:00 (15 minutes)

Presenter: BORYSENKO, Andrii (KIT)

Contribution ID: 34 Type: not specified

#### **EO** bunch time profile monitor for CLIC

Friday 27 March 2015 10:15 (15 minutes)

**Presenter:** TYRK, Mateusz A. (University of Dundee)

Contribution ID: 35 Type: not specified

### Summary of SiPM studies and overview of applicability for Beam Loss Monitoring systems

Friday 27 March 2015 10:30 (15 minutes)

Presenter: NEBOT DEL BUSTO, Eduardo (University of Liverpool (GB))

Contribution ID: 36 Type: not specified

### Accelerator Timing Monitor with Femtosecond Precision

Friday 27 March 2015 10:45 (15 minutes)

**Presenter:** PAN, Rui (STFC Daresbury Laboratory (GB))

Contribution ID: 37 Type: not specified

### Development of a laserwire emittance scanner for CERN's LINAC4

Friday 27 March 2015 11:30 (15 minutes)

**Presenter:** HOFMANN, Thomas (CERN)

Contribution ID: 38 Type: not specified

#### The new design of the THz streak camera at PSI

Friday 27 March 2015 11:45 (15 minutes)

**Presenter:** GORGISYAN, Ishkhan (PSI)

Contribution ID: 39 Type: not specified

### Velocity measurements usuing self-mixing technique in laser diodes

Friday 27 March 2015 12:00 (15 minutes)

**Presenter:** ALEXANDROVA, Alexandra (University of Liverpool/Cockroft Institute)

Contribution ID: 40

Type: not specified

### Precision determination of electron beam energy with Compton backscattered laser photons at ANKA

Friday 27 March 2015 12:15 (15 minutes)

Presenter: CHANG, Cheng (Karlsruhe Institute of Technology (KIT))

Contribution ID: 41 Type: not specified

#### **Summary & Conclusion**

Friday 27 March 2015 12:30 (15 minutes)

**Presenter:** WELSCH, Carsten (Cockcroft Institute / University of Liverpool)

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Contributed talk

Contribution ID: 42 Type: not specified

#### **Contributed talk**