

Helmholtz Laser and Photonics Meeting

03. – 05. December 2019, DESY, Hamburg

Draft Programme

Dienstag, 3. Dez. 2019

11:00 Registration

13:00 Welcome

Session 1 Laser for large scale facilities

13:10 Ultrafast Laser Development for X-ray FELs at DESY
HARTL, Ingmar (DESY)

13:40 FLUTE gun laser setup & experience
NASSE, Michael (KIT)

14:10 UV photocathode laser for the CW SRF-gun at ELBE radiation source
RYZHOV, Anton (HZDR)

14:30 JuSPARC – The Jülich Short-Pulsed Particle and Radiation Center
BÜSCHER, Markus (Forschungszentrum Jülich)

15:00 Overview of GSI's laser activities
BAGNOUD, Vincent (GSI Darmstadt)

15:30 European XFEL: next generation high rep-rate hard x-ray light source – pump probe lasers for user operation
LEDERER, Maximilian (European XFEL)

16:00 coffee break

Session 2 Laser sensing and diagnostics

16:30 Development and applications of airborne and spaceborne lidar system at DLR
FIX, Andreas (German Aerospace Center)

17:00 Time-Domain Characterization and Control of high-energy laser pulses at PHELIX
MAJOR, Zsuzsanna (GSI)

Session 3 Mid IR laser

17:20 Research in 2 micron lasers and non-linear converters for the Mid-IR
EICHHORN, Marc (KIT)

17:50 Generation and characterization of tailored MIR waveforms for steering molecular dynamics
NAMBOODIRI, Mahesh (DESY)

18:30 Reception

Mittwoch, 4. Dez. 2019

Session 4-1 High energy laser 1

- 9:00 High Intensity Lasers of HIBEF-Helmholtz International Beamline for Extreme Fields at the European XFEL
TONCIAN, Toma (HZDR)
- 9:30 Concept and Setup of a new on-shot Adaptive Optics Loop at PHELIX
OHLAND, Jonas (GSI)
- 9:50 Current status and future development of the POLARIS laser system at HI-Jena
KALUZA, Malte (HIJ)
- 10:20 Actively cooled Nd:glass amplifier development at GSI PHELIX
ZIELBAUER, Bernhard (GSI)

10:40 coffee break

Session 4-2 High energy laser 2

- 11:10 High power lasers for advanced accelerator concepts at the ELBE center Dresden-Rossendorf
SCHRAMM, Ulrich (HZDR)
- 11:40 Towards improved laser-contrast on different timescales at the PHELIX lasersystem
ZOBUS, Yannik (GSI)
- 12:00 Overview of FLASHForward and PLASMED-X projects
PODER, Kristjan (DESY)

12:30 Lunch

Session 5-1 High average power laser 1

- 13:20 JuSPARC_VEGA: A 1.4 TW / 1 kHz laser system for generation of high-energy photons and electron acceleration
ADAM, Roman (Forschungszentrum Jülich)
- 13:50 Multi-kW Terawatt-Level Burst-Laser System
KÖRNER, Jörg (IOQ FSU Jena)
- 14:10 Laser Developments at HI Jena - Status and Future Developments
ZEPF, Matt (HIJ)
- 14:40 Title: KALDERA – A high average power laser-plasma acceleration project at DESY
MAIER, Andreas (DESY)
- 15:10 Ultrafast Optical and X-ray Sources at UFOX Group CFEL-DESY
KÄRTNER, Franz (DESY)
- 15:40 Poster session + coffee break**
FLASH2 pump-probe laser: current status and performance
ALISAUSKAS, Skirmantas (DESY)

Developments and Results from JETi200

SÄVERT, Alexander (FSU Jena)
Wavefront measurement and correction at PHELIX
EISENBARTH, Udo

Relaxation dynamics of electronically photoexcited ferricyanide in water and an ionic liquid environment probed by femtosecond time-resolved EUV photoemission spectroscopy
KUZKOVA, Nataliia (HZB)

Development steps towards a 10 kJ thin disk laser with 100 Hz repetition rate,
SPEISER, Jochen (DLR-TP)

A transportable 1 kW pulsed laser container for laser ranging of space debris
SAUDER, Daniel (DLR)

The PHELIX Control System "PCS"
GÖTTE, Stefan (GSI)

CS++ - Extending the NI Actor Framework
BRAND, Holger (GSI)

Experimental Results on an OPCPA Seed System for a Laser-Plasma Acceleration Drive Laser
HÜLSENBUSCH, Thomas (CFEL/ Uni HH)

Comparison of two low-noise CEP stabilization methods for an environmentally stable Yb: fiber
SALMAN, Sarper (DESY/HI JENA)

Session 5-2 High average power laser 2

16:40 High Power Laser Development at DLR
DEKORSY, Thomas (DLR)

17:10 High performance ultrafast fiber lasers
LIMPERT, Jens (HIJ)

17:40 High Energy Pulse and High Average Power Lasers Development
PERGAMENT, Mikhail (DESY)

18:00 Wim Leemans, Director M-Division

19:00 Dinner

Donnerstag, 5. Dez. 2019

Session 6 Few-cycle laser and HHG sources

- 9:00 Towards novel attosecond-resolved pump-probe schemes for the investigation of ultrafast electron dynamics in complex molecules
TRABATTONI, Andrea (CFEL-DESY)
- 09:30 Probing Condensed-Phase Electronic Structure with Table-Top, Ultrashort Vacuum Ultraviolet, Extreme Ultraviolet, & Soft X-ray Pulses
WILKINSON, Iain (HZB)
- 10:00 Recent laser pulse post-compression efforts at DESY
HEYL, Christoph (DESY and HI Jena)
- 10:20 *Coffee break*
- 10:50 Close out
- 12:00 lunch