

NOCE 2017 - Program 19-20 Sept.

| 19 Sept., Tue | | 20 Sept., Wed | |
|-------------------------|---|--|---|
| 08:30 | | Chair: Dinh Nguyen (LANL) | |
| | | 6. [LCON] Beam dynamics problems for an X-ray FEL oscillator, Kwang-Je Kim (ANL) | |
| 09:00 | | 7. [LCON] Fully coherent FEL pulses in VUV and x-ray wavelengths, Enrico Allaria (ELETTRA) | |
| 09:30 | | round table | |
| 10:00 | | coffee break | |
| 10:30 | | Chair: Peter Kuske (HZB) | Chair: Zhirong Huang (SLAC) |
| | | S1.1 [SCE] Theoretical models of CSR in storage rings, Yunhai Cai (SLAC) | L1.1 [LCON] Schemes for a large bandwidth FEL, Sven Reiche (PSI) |
| 11:00 | | S1.2 [SCE] Toward a Theory of CSR in Realistic Vacuum Chambers, Robert Warnock (SLAC) | L1.2 [LCON] Chirped pulse amplification for short VUV FEL pulses, David Garzella (CEA) |
| 11:30 | | S1.3 [SCE] Practical theory for calculating the microwave instability threshold in electron storage rings, Ryan Lindberg (ANL) | L1.3 [LCON] Advances on phase-merging enhanced HGFG FELs, Haixiao Deng (SINAP) |
| 12:00 | | | |
| 12:30 13:00 13:30 | | Lunch on Your own | |
| 14:00 | Registration of Participants at the Registration Desk | Chair: Robert Hettel (SLAC) | |
| | | 8. (SCON) Operational scenarios of the Chinese high energy photon source project Qing Qin (IHEP) | |
| 14:30 | Chair: Kwang-Je Kim (ANL, Univ. Chicago) 0. Welcome, opening and introduction to the workshop Simone Di Mitri (ELETTRA) | 9. [SCON] The BESSY VSR project for short X-ray pulse production, Andreas Jankowiak (HZB) [to be presented by Paul Goslawski] | |
| 15:00 | 1. Particle beam physics in Arcidosso, 20 years later Swapan Chattopadhyay (FNAL) | 10. [SCON] Storage ring beam dynamics with crab cavities for short and long bunches, Xiaobiao Huang (SLAC) [to be presented by Alexander Zholents] | |
| 15:30 | 2. Summary of the IPAM workshop, Amie Wilkinson (Univ. of Chicago) | round table | |
| 16:00 | coffee break | coffee break | |
| 16:30 | Chair: Max Cornacchia (SLAC / Retired) | Chair: Peter Kuske (HZB) | Chair: Zhirong Huang (SLAC) |
| | 3. Can there be just one ideal light source?, Jerry Hastings (SLAC) | S2.1 [SCE] Collective effects at SIRIUS, Fernando Henrique de Sà (LNLS) | L2.1 [LCON] A compact FEL-driven inverse Compton scattering high-energy gamma-ray source, Massimo Placidi (LBNL) |
| 17:00 | 4. Beam by design, Alexander Zholents (ANL) | S2.2 [SCE] Self-consistent simulations and analysis of coupled-bunch instability for multibunch configurations, Gabriele Bassi (BNL) | L2.2 [LCON] Generation of high-power, tunable THz radiation from laser interaction with an e-beam, Zhirong Huang (SLAC) |
| 17:30 | 5. Potentialities and compromises in design of storage ring diffraction limited light sources, Richard Walker (DLS) | S2.3 [SCE] Transverse coupled-bunch instability thresholds with a harmonic-cavity-flattened rf potential, Francis Cullinan (MAX-IV) | L2.3 [LCON] Advances in Inverse FELs, Pietro Musumeci (UCLA) |
| 18:00 | round table | | |
| 18:30 | Aperitif at the Castle. | | |
| 19:00 | Registration of Participants at the Registration Desk | | |

LEGENDA

0. - 23. = Plenary Talks @ 1st Floor
L = Linacs, **WORKING GROUP 1 @ 1st Floor**
S = **Storage Rings, WORKING GROUP 2 @ Ground Floor**
CON = Concepts
LND = Linear and Nonlinear Dynamics
CE = Collective Effects

NOCE 2017 - Program 21-22 Sept.

| 21 Sept., Thu | | 22 Sept., Fri | |
|---|--|--|---|
| Chair: Swapan Chattopadhyay (FNAL) | | Chair: Sven Reiche (PSI) | |
| 08:30 | 11. [SLND] From the Birkhoff normal forms theory of betatronic motion to plasma acceleration, Giorgio Turchetti (INFN, Univ. of Bologna) | 16. [LCON] Towards attosecond science at LCLS and LCLS-II with sub-fs beam length manipulations, James McArthur (SLAC) | |
| 09:00 | 12. [SLND] Diffusion in stochastically-perturbed Hamiltonian systems and the recent application to the LHC dynamic aperture experiments, Armando Bazzani (INFN, Univ. of Bologna) | 17. [LCON] Attosecond FEL pulses: physical and technical challenges Takashi Tanaka (RIKEN Spring-8) | |
| 09:30 round table | | 09:30 round table | |
| 10:00 coffee break | | 10:00 coffee break | |
| Chair: Andrea Franchi (ESRF) | | Chair: Toru Hara (RIKEN SPring-8) | |
| 10:30 | S3.1 [SLND] Misconceptions about betatron coupling in storage-ring-based light sources, Andrea Franchi (ESRF) | L3.1 [LCE] CSR suppression at the dogleg beam transport of SACLA, Toru Hara (RIKEN Spring-8) | 18. [LCE] Beam manipulations in FEL linacs using self-induced fields, Paolo Craievich (PSI) |
| 11:00 | S3.2 [SLND] Measurement of linear optics and coupling at NSLS-II, Weiming Guo (BNL) | L3.2 [LCE] Beam shaping to improve the FEL performance at LCLS, Yuantao Ding (SLAC) | 19. [LCE] Dechirpers design and experimental results, Tim Maxwell (SLAC) |
| 11:30 | S3.3 [SLND] Production of round beams in storage ring light sources, Peter Kuske (HZD) | L3.3 [LCE] Singularities of particle trajectory caustics & beam shaping in bunch compressors, Tessa Charles (Univ. of Melbourne) | 20. [LCE] Fresh-slice x-ray FEL schemes for advanced x-ray applications, Alberro Lutman (SLAC) [to be presented by Tim Maxwell] |
| 12:00 | S3.4 [SLND] Production of round beams at PETRA IV, Ilya Agapov (DESY) | L3.4 [LCE] Experience of bunch compression with linearising achromats in the MAX-IV Linac, Sara Thorin (MAX-IV) | 12:00 round table |
| 12:30 | Lunch on Your own | | 13:00 |
| 13:00 | Lunch on Your own | | 13:30 |
| Chair: Armando Bazzani (INFN, Univ. of Bologna) | | Chair: Enrico Allaria (ELETTRA) | |
| 14:00 | 13. [SLND] Recent progress on nonlinear integrability: theoretical work, simulations and experimental results, Alexander Valishev (FNAL) | 21. [LCON] First operation of a harmonic lasing self-seeded FEL, Evgeny Schneidmiller (DESY) | |
| 14:30 | 14. [SLND] Theory of square matrix for nonlinear optimization, and application to NSLS-II, Li-Hua Yu (BNL) | 22. [LCON] Harmonic self-seeding for the MaRIE x-ray FEL, Dinh Nguyen (LANL) | |
| 15:00 | 15. [SLND] Suppression of higher-order terms of amplitude-dependent tune shift in nonlinear optimization of the SPring-8 upgrade Kouichi Soutome (RIKEN SPring-8, JASRI) | 23. [LCON] TW-level x-ray FELs, Claudio Emma (UCLA, SLAC) [to be presented by Yuantao Ding] | |
| 15:30 round table | | 15:30 round table | |
| 16:00 coffee break | | 16:00 coffee break | |
| Chair: Andrea Franchi (ESRF) | | Chair: Atoosa Meseck (HZB) | |
| 16:30 | S4.1 [SLND] Could synchrotron light sources benefit from experience with beams split at CERN? Massimo Giovannozzi (CERN) | L4.1 [LCE] A time-discrete Vlasov approach to LSC driven micobunching in FEL-like beam lines, Philipp Amstutz (DESY) | Report from WG1 (Storage Rings) by P. Kuske |
| 17:00 | S4.2 [SLND] First experimental results of operating beams split in horizontal phase space at BESSY II, Paul Goslawski (BESSY) | L4.2 [LCE] Generation of saw-tooth beam at AWA, Gwanghui Ha (POSTECH) | Report from WG2 (Linac-FELs) by Z. Huang & T. Hara |
| 17:30 | S4.3 [SLND] Sextupole calibrations via off-energy orbit response matrix and high order dispersion, Nicola Carmignani (ESRF) | 17:30 Close-out | |
| 18:00 | Seminar open to the public (at the Theater of Unanimi, in Italian): "La sostenibile complessità del traffico: il punto di vista di un fisico" Armando Bazzani (INFN, Univ. of Bologna) | | |
| 18:30 | | | |
| 19:00 | | | |
| 19:30 Social Dinner at the Aiule Restaurant (19:30 - 22:30) | | | |

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