6th Microbunching Workshop, 6-8 October 2014: Program

Monday 6

Session Mo-1: Codes – I  
Chair: S. Di Mitri (Elettra)

8:15– 8:45  Registration

8:45  Opening by M. Svandrlik (Elettra Sincrotrone Trieste)

9:00  M. Venturini (LBNL), “High-resolution microbunching instability studies in the presence of 3D effects”

9:30  R. Li (JLAB), “Update on 2D CSR effects”

10:00 Discussion

10:30 Coffee Break

Session Mo-2: Codes – II  
Chair: L. Giannessi (Elettra & ENEA)

11:00  G. Bassi (BNL), “CSR and microbunching in bunch compressors”

11:30  J. Esberg (CERN), “1D CSR with shielding in the PLACET code”

12:00  B. Terzic (Old Dominion Univ.), “High-performance CSR simulations on GPUs”

12:30 Discussion

13:00 Lunch

Session Mo-3: CSR and Microbunching in Arcs  
Chair: M. Cornacchia (Elettra)

14:30  Y. Jiao (IHEPB), “Controlling CSR-induced emittance growth in DBAs”

15:00  D. Douglas (JLAB), “Controlling CSR-induced emittance growth and microbunching instability in ERL arcs”

15:30  C. Hall (Colorado State Univ.), “CSR and MBI effects in the JLAB ERL driven FEL”

16:00 Discussion
Tuesday 7

Session Tu-1: Injector and Laser Heater
Chair: A. Cianchi (INFN)

9:00 X. Yang (BNL), “Seeding, controlling, and benefiting from the microbunching instability”

9:30 S. Bettoni (PSI), “Pulse stacking and microbunching instability: simulations and measurements at the SwissFEL Injector”

10:00 Discussion

10:30 Coffee Break

11:00 M. Dohlus (DESY), “Simulation of the trickle heating effect at the EuXFEL”

11:30 E. Ferrari (Elettra), “Benefits of the laser heater induced energy spread for COTR and high harmonic conversion in HGHG FEL”

12:00 Discussion

12:30 Lunch

Session Tu-2: LSC Amplifiers
Chair: A. Meseck (HZB)

14:00 C. Lechner (Hamburg Univ.), “Experimental studies on FEL gain controlled by laser-induced longitudinal space charge amplification”

14:30 K. Hacker (TU Dortmund Univ.), “Longitudinal space charge assisted Echo-seeding of a free-electron laser with laser-spoiler noise suppression”

15:00 A. Gover (Tel Aviv Univ.), “Short wavelength limits for control and measurement of collective micro-dynamic noise-suppression/gain”

15:30 Discussion

16:30 End of Works

19:00 Social Dinner at the Savoia Hotel
Wednesday 8

Session We-1: Diagnostics  
Chair: S. Biedron (CSU)

8:30  P. Krejcik (SLAC), “Diagnostics for measuring and mitigating femtosecond microbunches at the LCLS”

9:00  T. Maxwell (SLAC), “MBI studies with the LCLS X-band transverse deflector”

9:30  G.L. Orlandi (PSI), “Overview of transverse profile monitors in SwissFEL”

10:00 Discussion

10:30 Coffee Break

Session We-2: Microbunching Instability in Rings  
Chair: M. Venturini (LBNL)

11:00  C. Evain (CNRS), “Microbunching instability in rings”

11:30  A. Chao (SLAC), “Steady-state microbunched beam in a storage ring for EUV radiation”

12:00 Discussion

12:30 Chairs Summaries (20’ total). End of the Workshop.

13:00 Transfer to Elettra Sincrotrone Trieste

13:30 Buffet Lunch at the Elettra Canteen

14:45 Visit to the FERMI FEL facility

17:30 Trip back to Trieste downtown