3rd LEL design workshop Program

Allottet time each talk: 15' + 10' (but LEL Overview: 20' + 10')

Sunday 26

19:30 – 21:00			Registration and Welcome Cocktail	

Monday 27

Time	Session	Chair	Tittle	Speaker
08:30 – 08:45			Registration	
08:45 – 08:50			Welcome	Caterina Biscari – ALBA
08:50 – 09:00			Introduction	Gabriele Benedetti – ALBA
09:00 – 09:30	LEL Overview	F. Perez	Overview of future diffraction-limited light source storage rings: Directions to follow in view of the physical and technological challenges we have today and how they are being overcome	Amor Nadji – SOLEIL
09:30 – 09:55	LEL Lessons learned	F. Perez	MAX IV: lessons learned	Magnus Sjöström – MAX IV
09:55– 10:20			ESRF-EBS: lessons learned	Nicola Carmignani – ESRF
10:20 – 10:45	LEL Design concepts	F. Perez	PETRA IV progress	Riccardo Bartolini – DESY
10:45 – 11:15			Coffee Break	
11:15 – 11:40	LEL Design concepts	S. Leemann	HALF progress (remote)	Zhenghe Bai – NSRL
11:40 – 12:05			Diamond-II progress	Ian Martin – Diamond
12:05 – 12:30			Six bend higher order achromat lattice for ALBA-II	Gabriele Benedetti – ALBA
12:30 – 12:55			ALS-U: highest brightness soft x-rays in just 200 m through an ultra-dense 9BA and extensive MOGA optimization	Changchun Sun – LBNL
12:55 – 14:30			Lunch	
14:30 – 14:55	LEL Lessons learned	M. Aiba	Sirius: lessons learned (remote)	Lin Liu – LNLS
14:55 – 15:20	LEL Tools	M. Aiba	Machine learning techniques for accelerators	Elena Fol – CERN
15:20 – 15:45			Machine Learning-Enhanced MOGA for Ultrahigh-Brightness Lattices	Simon Leemann – LBNL
15:45 – 16:15			Coffee Break	
16:15 – 16:40	LEL Tools	A. Mochihashi	Toolkit for Simulated Commissioning (SC)	Thorsten Hellert – DESY
16:40 – 17:05			UFO tracking code for GPUs	Michele Carlà – ALBA
17:05 – 17:30	LEL Design concepts	A. Mochihashi	Latest ultra low-emittance lattice designs following the stream of the ESRF-EBS hybrid lattice, and future scope (remote)	Pantaleo Raimondi – SLAC
17:30 – 18:20		S.Leemann, M.Aiba		

Tuesday 28

Time	Session	Chair	Tittle	Speaker
09:00 – 09:25	LEL Design concepts	Y. Papaphilippou	Elettra 2.0 progress	Emanuel Karantzoulis – Elettra
09:25 – 09:50			Low emittance lattice design with variable long. field dipoles for Elettra upgrade	Axel Poyet – CERN
09:50 – 10:15			BESSY III progress	Paul Goslawski – HZB
10:15 – 10:40			Deterministic design of multibend HOA lattices	Bettina Kuske – HZB
10:40 – 11:10			Coffee Break	
11:10 – 11:35	LEL Design concepts		7BA-4BA HOA lattice developed for the SOLEIL upgrade	Ryutaro Nagaoka – SOLEIL
11:35 – 12:00	LEL Errors, Alignment, Correction		Full coupling studies at ALBA	Zeus Martí – ALBA
12:00 – 12:25			Prospects for optics measurement and correction in FCC-ee (remote)	Jacqueline Keintzel – CERN
12:25 – 12:50			Overview on sensitivities of ultra low-emittance light source rings against errors, measures developed to enhance robustness and strategies of first-turn commissioning (remote)	Vadim Sajaev – ANL
12:50 – 13:00			Group Picture	
13:00 – 14:30			Lunch	
14:30 – 14:55	LEL Collective effects	R. Nagaoka	Overview of collective effects and their mitigation in ultra low-emittance light source rings	Yong-Chul Chae – DESY
14:55 – 15:20			Review of bunch lengthening with harmonic cavities in ultra low-emittance light source rings, their impact on beam collective effects and future directions	Francis Cullinan – MAX IV
15:20 – 15:45			Diamond-II: Impedance database, calculation of single and multi-bunch instability thresholds / rise times, ion effects and the impact of a passive super-conducting harmonic cavity	Teresia Olsson – Diamond
15:45 – 16:15			Coffee Break	
16:15 – 16:40	LEL Collective effects	U. Iriso	Impedance and collective effects of HEPS storage ring (remote)	Na Wang – IHEP
16:40 – 17:05			Combined simulation of space-charge, IBS and damping/cooling for low emittance rings and beyond	Michail Zampetakis – CERN
17:05 – 18:00	Discussion	L.Liu, R.Nagaoka		

20:30 - 22:30			Dinner	

Wednesday 29

Time	Session	Chair	Tittle	Speaker
09:00 - 09:25	LEL Injection	I.Martin	ESRF-EBS injection status and plans	Simon White – ESRF
09:25 - 09:50			MIK performance at the MAX IV 3 GeV ring and beam dynamics design of a MIK for the MAX IV 1.5 GeV ring	Marco Apollonio – MAX IV
09:50 – 10:15			Commissioning and characterization of the performance of the MIK (Multipole Injection Kicker) installed at SOLEIL	Randy Ollier – SOLEIL
10:15 – 10:40			Injection into SLS-2: beam dynamics aspects and technological challenges	Masamitsu Aiba – PSI
10:40 – 11:10			Coffee Break	
11:10 – 11:35	LEL Injection	S.White	The swap-out injection using the booster as an accumulator ring at the High Energy Photon Source (remote)	Zhe Duan – IHEP
11:35 – 12:00			Injection into Diamond-II: beam dynamics and technological challenges	Jonas Kallestrup - Diamond
12:00 – 12:50	Discussion	I.Martin, S.White		
12:50 – 13:00			Closing remarks	
13:00 – 14:30			Lunch	
14:30 -16:00			Visit to the ALBA facility	