

## Beam Dynamics and Technologies for Future Colliders, Zurich, 21 February – 6 March, 2018

Time	Wed. 21 Feb.	Thursday 22 February	Friday 23 February	Saturday 24 February	Sunday 25 February	Monday 26 February	Tuesday 27 February	Wed. 28 Feb	Thursday 1 March	Friday 2 March	Saturday 3 March	Sunday 4 March	Monday 5 March	Tues 6 March
08:30	A R R I V E L D A Y	Opening Seminar	Detectors for High Energy Colliders/ Machine Detector Interface I	Recap. of Long. BD I	Collider Diagnostics/ Measurement of Critical Beam Parameters I	Beam-Beam Effects/ Beamstrahlung I	Instabilities in High-Energy Colliders and their Mitigation I	E X C U R S I O N	Linear Collider Beam Dynamics I	Normal Conducting & Permanent Magnets	Normal Conducting High Gradient RF Systems I	Interactions of Particles with Matter	Low Level RF Challenges/ Timing System	D E P A R T U R E  A F T E R  B R E A K F A S T
09:20		L. Linssen	F. Tecker	J. Wenninger	W. Herr	O. Boine-Frankenheim	D.Schulte		T. Zickler	W. Wuensch	N. Mokhov	A. Gallo		
09:30		High Energy Physics at Colliders	Recap. of Transverse BD I	Large Colliders Critical Technologies	Circular Hadron Collider Beam Dynamics I	Circular Lepton Collider Beam Dynamics/ Damping Rings I	Injection and Extraction		Superconducting RF Systems I	Superconducting RF Systems III	Normal Conducting High Gradient RF Systems II	Magnet Vibration and Feedbacks	Kickers and Septa	
		M. Mangano	H. Schmickler	M. Syphers	K. Oide	M. Aiba	E. Jensen		E. Jensen	W. Wuensch	A. Seryi	M. Paraliev		
10:30		COFFEE	COFFEE	COFFEE	COFFEE	COFFEE	COFFEE		COFFEE	COFFEE	COFFEE	COFFEE		
11:00		Luminosity Goals, Critical Parameters	Detectors for High Energy Colliders/ Machine Detector Interface II	Recap. of Long. BD II	Collider Diagnostics/ Measurement of Critical Beam Parameters II	Beam-Beam Effects/ Beamstrahlung II	Instabilities in High-Energy Colliders and their Mitigation II		Linear Collider Beam Dynamics II	Single Shot High Brilliance Beam Transport	RF Power Systems, CLIC Drive Beam	Machine Protection Concepts	Alignment & Metrology/ Requirements and Realisation	
11:50		B. Muratori	L. Linssen	F. Tecker	J. Wenninger	W. Herr	O. Boine-Frankenheim		D. Schulte	V. Kain	S. Doebert	N. Mokhov	D. Missiaen	
12:00		Linear Collider Studies Overview	Recap. of Transverse BD II	Discussion Session I	Circular Hadron Collider Beam Dynamics II	Circular Lepton Collider Beam Dynamics/ Damping Rings II	Discussion Session II		Superconducting RF Systems II	High Brightness Beam Transport	Discussion III	Final Focus Layouts and Stability Considerations	Positron Production	
12:50		S. Stapnes	H. Schmickler	M. Syphers	K. Oide	E. Jensen	V. Kain		A. Seryi	M. Kuriki				
13:00		LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH		LUNCH	LUNCH	LUNCH	LUNCH		
14:30		Large Circular Colliders Overview (including h-e Options)	Lessons learnt from LHC/LEP	Case Studies Introduction	F R E E	Case Studies II	Case Studies IV		Superconducting Material/ Cables	Case Studies VI	F R E E	Case Studies VIII	Reliability Engineering/ Availability of a Large Collider Complex	
15:20		M. Benedikt	M. Lamont	W.Herr B. Holzer D. Schulte		W.Herr B. Holzer D. Schulte	W.Herr B. Holzer D. Schulte		C. Senatore	W.Herr B. Holzer D. Schulte		M. Zerlauth		
15:30		Introduction to Muon Collider and Photon Collider	Lessons learnt from SLC	Case Studies I		Case Studies III	Case Studies V		Superconducting Magnets/Low Temperature Superconductors I	Case Studies VII		Case Studies IX	Case Studies Presentations I	
16:20		W. Chou	W.Herr B. Holzer D. Schulte	W.Herr B. Holzer D. Schulte		W.Herr B. Holzer D. Schulte	W.Herr B. Holzer D. Schulte		L. Bottura	W.Herr B. Holzer D. Schulte		W.Herr B. Holzer D. Schulte		
16:30		COFFEE	COFFEE	COFFEE		COFFEE	COFFEE		COFFEE	COFFEE		COFFEE		
17:00		The Big Picture of High Energy Physics	Large Colliders Civil Engineering and Siting	Polarized Electron Beams/Energy Calibration	S E M I N A R	Seminar I	Vacuum Challenges		Superconducting Magnets/High Temperature Superconductors II	Advanced Future Collider Concepts	M A S K S	Collimators, Dumps & Masks	Case Studies Presentations II	
17:50		J. Osborne	J. Wenninger	R. Kersevan		L. Bottura	P. Muggli		M. Seidel	W.Herr B. Holzer D. Schulte				
18:00		Extended Discussion								Closing Talk				
19:30		Dinner	Dinner	Dinner	Dinner	Dinner	Dinner		Dinner	Dinner	Dinner	Dinner	Special Dinner	