

ILC 2007

Nick Walker ILC@DESY Project Meeting 13.04.2007

Global Design Effort

Concept

- 3rd in series of General ILC Workshops
 - KEK November 2004

- Snowmass July 2005
- 4 day workshop with 2 days parallel Working Groups
 - Note ILCWS is 5 days

ILC2007 Goals

- To review current status of global ILC R&D and future plans, including S-task force findings both for BCD-related and ACD items, and activities in and around test facilities (both existing and proposed).
- Identify and prioritise critical engineering milestones for EDR phase (cost driven), including integration (and relationship to) the critical R&D milestones.
- To promote and improve collaboration between groups working on ILC related R&D:
 - To encourage a broader participation from active groups around the world
 - To attract new researchers to the field.
- To define the scope of the EDR and consolidate EDR planning:
 - Review project WBS and 'Work Package' structure.
 - Refine proposed schedule, milestones, deliverables etc.
 - Begin process of WP allocation.



Identified WGs

- Main Linac
 - cavities + auxiliaries; cryomodule; RF power systems; cryogenics; tunnel layout etc.
- Damping Ring
 - Lattice design; emittance control; collective effects; kicker R&D; s.c. wiggler technology; tunnel layout etc.
- Beam Delivery System
 - Lattice layout; MDI issues; tunnel layout etc.
- Sources
 - E- source
 - E+ source (focus)
- CFS
 - Civil construction; tunnel layouts; electrical power and water cooling.
- Accelerator Physics (LET beam dynamics)
 - Start to end simulations; Emittance tuning; Feedback systems simulation; Luminosity performance etc.
- Metrology
 - Survey and alignment.
- Controls
 - High- and low-level controls (global) issues; design for high-availability; LLRF (linac); GAN etc.
- Polarisation
 - All aspects pertaining to spin (machine).
- EDR: general EDR-phase planning WG.

Instrumentation?

Global Design Effort



Conveners

- Deepa Angal-Kalinin BDS STFC Daresbury Lab. Hitoshi Yamamoto Univ. Tokyo Andrei Servi SLAC ML DESY Lutz Lilje Hitoshi Hayano KEK **Chris Adolphsen** SLAC Nikolay Solyak FNAL DR Andrei Wolski Cockcroft Institute Susanna Guiducci INFN IHEP Jai Gao Mike Zismann LBNL e+e- Sources **Duncan Scott** SFTC Daresbury Lab Masao Kuriki KEK Axel Brachmann SLAC SLAC John Sheppard CFS CERN Jean-Luv Baldy Atsushi Enomoto KEK Vic Kuchler FNAL DESY Controls **Kay Reihlich** Shinichiro Michizono KEK John Carwardine Accelerator Phys. Daniel Schulte CERN Kiyoshi Kubo FNAL Paul Lebrun FNAL DESY Metrology Markus Schloesser KEK Ryuhei Sugahara **Rick Ford FNAL** Polarisation Gudrid Moortgat-pick **Durham University** DESY Sabine Riemann
- Conveners from all regions
- Main our RDR Area Systems leaders
- An announcement listing contact details and a call for presentations will be made shortly

esign Effort



Tentative Programme

Wednesday	Thursday									Friday										Saturday								
30.05.07	31.05.07									4	01.06.07										02.06.07							
	1	2	3	4	5	6		8	9	1	2	3	4	5	6		8		9	1	2	3	4 5	0 6	1	8	9	
Joint plenary with LCWS		EDR	IVIL	CFS	SRC	CNTR	DR	APY	AIF	EDR	ML	CFS	POL	CNTR		APY	DR	wor BI	rking	g gr	oup	sur	mma	ary p	rep ,	/ res	ser\	
Joint plenary with																					GD	ΕV	VG s	sumr	nari	es		
LCWS																												
GDE											IND				MET						GD	ΕV	VG s	sumr	nari	es		
Plenary																												
	MDI																											
0.05																									<u></u>	~		
GDE																					PI	ena	iry w	ith L		S		
Plenary (MG intros)																						((ciose	e out)			
																			H								_	
	EDR Phase Planning (key players)																											
																				Organ Concert								
Reception										Banquet																		

Parallel structure expected to evolve as detail programmes emerge (including joint sessions)

Global Design Effort