

TPC RESOURCES GUESSTIMATES

RS WP210 20141211

Yasuhiro at optimization meeting yesterday

Resource need in R&D phase

- Assumption in TDR validation WG
 - After approval of the ILC project, 4 years are necessary for the preparation to get ready for construction
- We can expect larger amount of budget in this preparation period
- We are requested to clarify budget and human resource needed in this period
 - A rule of thumb; 10 – 20% of construction cost/manpower
 - But we should try to estimate by ourselves
 - Estimate of each sub-detector will not be disclosed: ILD R&D cost as a whole
- What happens on detectors in this period
 - R&D
 - Proposal
 - Technology choice
 - Detailed (construction ready) design
 - Industrialization
 - TDR of sub-detectors

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TPC		Now	Y-4	Y-3	Y-2	Y-1		Y1	Y2	
Timeline		R&D	R&D	R&D	R&D	R&D				
Budget										
Annual budget (MILCU)		0.5	0.6	0.6	0.6	0.6		1.1	3.59	
FTE from external labs/univ										
Item										
Field cage			1	1	1	2		3	3	
End plate			1	2	2	3		3	5	
Modules			5	5	5	5		5	5	
Electronics			5	5	5	5		5	5	
Laser			2	2	2	2		2	2	
Power supply			1	1	2	2		3	3	
High voltage			1	1	1	1		2	2	
Gas and Cooling			1	1	1	1		2	2	
DAQ			1	1	1	1		2	2	
Monitor			1	1	1	1		2	2	
Software			2	2	2	2		3	3	
Management			1	1	1	1		3	3	
Total			22	23	24	26		35	37	
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