LARP FY06 budget v2b

Oct 31, 2005			TOTAL					Labor				MTSC			
WBS			BNL	FNAL	LBNL	SLAC	Total	BNL	FNAL	LBNL	SLAC	BNL	FNAL	LBNL	SLAC
US LHC Accelerator Research Program			**2838**	**3207**	**3975**	**780**	**11000**								
1	**Accelerator Systems**	**Shiltsev**	**855**	**1150**	**1255**	**700**	**3960**	**528**	**932**	**926**		**327**	**218**	**329**	
1.1	**Instrumentation**	**Ratti**	345	250	935	0	1530								
1.1.1	Phase I														
1.1.1.1	Tune feedback	Cameron	300	25			325	200	17			100	8		
1.1.1.2	Luminometer	Ratti	25		935		960	20		667		5		268	
1.1.1.4	Schottky monitor	Jansson	20	225			245	20	180				45		
1.2	**Commissioning**	**Syphers**	230	620	90	0	940								
1.2.1	Phase I														
1.2.1.1	Beam Commissioning	Harms	150	250			400	105	175			45	75		
1.2.1.2	Interaction Region Commissioning	Lamm	80	370	90		540	58	300	60		22	70	30	
1.3	**Collimation**	**Markiewicz**	100	50	0	700	850								
1.3.1	Phase I														
1.3.1.1	Cleaning efficiency studies	Drees	50				50	45				5			
1.3.2	Phase II														
1.3.2.1	Rotating Collimator R&D	Markiewicz		20		700	720		20						
1.3.2.2	Tertiary collimator study	Mokhov		30			30		30						
1.3.2.3	Irradiation studies	Simos	50				50	26				24			
1.4	**Accelerator Physics**	**Shiltsev**	180	230	230		640								
1.4.1	Studies														
1.4.1.1	Electron Cloud	Furman	50		150		200	44		129		6		21	
1.4.1.2	Interaction Regions & Beam-Beam	Sen	0	180	80		260		165	70			15	10	
1.4.1.3	Beam-Beam wires	Sen	130	50			180	10	45			120	5		
2	**Magnet R&D**	**Gourlay**	**1543**	**1787**	**2320**		**5650**	**1144**	**1412**	**1594**		**399**	**375**	**726**	
2.1	**Design Studies**	**Zlobin**	83	190	105		378								
2.1.4	IR Magnets														
2.1.4.1	HQ conceptual design	Sabbi		39	62		101		39	62					
2.1.4.2	LQ conceptual design	Ambrosio	13	51	43		107	13	51	43					
2.1.4.3	IR magnet study	Gupta	48	21			69	48	21						
2.1.3	IR Cryogenics														
2.1.3.2	Inner triplet cryo & heat transfer	Rabehl	22	49			71	20	47			2	2		
2.1.3.3	Radiation heat deposition	Mokhov		30			30		30						
2.2	**Model Magnet R&D**	**Sabbi**	0	1334	1063		2397								
2.2.1	Quadrupole														
2.2.1.1	Technology Quad TQS01	Caspi		92	345		437		70	315			22	30	
2.2.1.2	Technology Quad TQC01	Bossert		432	161		593		362	148			70	13	
2.2.1.3	Technology Quad TQS02	Caspi		10	203		213		10	174				29	
2.2.1.4	Technology Quad TQC02	Bossert		502	25		527		408	20			94	5	
2.2.1.5	Coil/Structure exchange TQE01	Ferracin		37	50		87		27	34			10	16	
2.2.1.6	Technology Quad TQS03	Caspi		108	170		278		38	126			70	44	
2.2.1.7	Technology Quad TQC03	Bossert		153	109		262		77	72			76	37	
2.3	**Supporting R&D**	**Ambrosio**	1282	67	504		1853								
2.3.1	Subscale models														
2.3.1.2	Small Quad SQ02 fab & test	Ferracin			155		155			132				23	
2.3.2	Long Magnet Development														
2.3.2.2	Racterack coil fab & test	Schmalzle	1262	32	92		1386	889	32	28		373	0	64	
2.3.2.3	Racetrack supporting structure	Ferracin			222		222			144				78	
2.3.3	Test integration														
2.3.3.1	Testing	Feher	20	35	35		90	16	28	30		4	7	5	
2.4	**Materials**	**Ghosh**	178	196	648		1022								
2.4.1	Conductor Support														
2.4.1.1	Strand R&D	Barzi	137	169	41		347	118	149	36		19	20	5	
2.4.1.2	Cable R&D	Dietderich	41	27	233		301	40	23	225		1	4	8	
2.4.1.3	Procurement	Ghosh			374		374			5				369	
3	**Program Management**	**Peggs**	**440**	**270**	**400**	**80**	**1190**								
3.1	**Administration**														
3.1.1	Systems														
3.1.1.1	Accelerator Systems	Shiltsev	240	60	60	20	380								
3.1.1.2	Magnet R&D	Gourlay	100	110	240	0	450								
3.1.1.3	Programmatic Travel	Peggs	60	60	60	20	200	0	0	0	0	60	60	60	20
3.1.1.4	Toohig Fellowship	Peggs	40	40	40	40	160	35	35	35	35	5	5	5	5
3.2	**Management Contingency**	Peggs					**200**								