						WBS	V470 Fri 5/3/13									
ID WBS	Task Name	Туре	Work	# Pi	rototyp	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital De
1 1	1 HPS		33,007 hrs	0	0	\$2,343,201.34	\$1,302,620.14	\$1,681,492.28	\$1,038,430.20	\$1,209,985.58	\$2,891,477.86	\$77,915.31	\$20,834.95	\$847,213.16	\$248,127.50	\$1,796,137.20 _W
2 1.1	1.1 Beamline		1,680 hrs	0	0	\$171,239.92	\$70,369.92	\$91,480.90	\$100,870.00	\$131,131.00	\$222,611.90	\$0.00	\$0.00	\$0.00	\$5,811.00	\$216,800.90 _W
3 1.1.1	1.1.1 Beamline Design		440 hrs	0	0	\$8,966.40	\$8,966.40	\$11,656.32	\$0.00	\$0.00	\$11,656.32	\$0.00	\$0.00	\$0.00	\$0.00	\$11,656.32 _W
	Stepan Stepanyan (Phys)		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	Ken Moffeit (Phys) MD Hall-B		160 hrs 120 hrs	0	0	\$0.00 \$8.966.40	\$0.00 \$8.966.40	\$0.00 \$11,656.32	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$11,656.32	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$11,656.32 W
4 1.1.2	1.1.2 Beamline Review		0 hrs	0	0	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 _W
5 1.1.3	1.1.3 Frascati beampipe 1		128 hrs	0	0	\$7,450.00	\$0.00	\$0.00	\$7,450.00	\$9,685.00	\$9,685.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,685.00 W
	Frascati beampipe 1		1	0	0	\$7,450.00	\$0.00	\$0.00	\$7,450.00	\$9,685.00	\$9,685.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,685.00 W
	Stepan Stepanyan (Phys) Ken Moffeit (Phys)		64 hrs	0	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
6 1.1.4	1.1.4 SVT Vacuum Box		248 hrs	0	0	\$27,122.40	\$18,482.40	\$24,027.12	\$8,640.00	\$11,232.00		\$0.00	\$0.00	\$0.00	\$0.00	\$35,259.12 _W
	Electron Run Flange		1	0	0	\$5,400.00	\$0.00	\$0.00	\$5,400.00	\$7,020.00	\$7,020.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,020.00 W
	Marco Oriunno (ME) Matt Swift (MD)		40 hrs 80 hrs	0	0	\$7,344.00	\$7,344.00	\$9,547.20	\$0.00	\$0.00 \$0.00	\$9,547.20	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$9,547.20 W
	Vacuum Flange hardware		1	0	0	\$11,138.40 \$1,080.00	\$11,138.40 \$0.00	\$14,479.92 \$0.00	\$0.00 \$1,080.00	\$1,404.00	\$14,479.92 \$1,404.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$14,479.92 W \$1,404.00 W
	Conflat gaskets		1	0	0	\$2,160.00	\$0.00	\$0.00	\$2,160.00	\$2,808.00	\$2,808.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,808.00 W
	Linear Shifts Cooling Feedthrough		3	0	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
	Stepan Stepanyan (Phys)		64 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
7 1.1.5	Ken Moffeit (Phys)		64 hrs 112 hrs	0	0	<i>\$0.00</i> \$17,110.80	<i>\$0.00</i> \$12,790.80	<i>\$0.00</i> \$16,628.04	<i>\$0.00</i> \$4,320.00	\$0.00 \$5,616.00	\$0.00 \$22,244.04	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 W \$22,244.04
7 1.1.5	1.1.5 Electron Target ElectronTarget		1121115		0											VV
	Electron Larget Matt McCulloch (MT)		40 hrs	0	0	\$4,320.00 \$5,446.80	\$0.00 \$5,446.80	\$0.00 \$7,080.84	\$4,320.00 \$0.00	\$5,616.00 \$0.00	\$5,616.00 \$7,080.84	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$5,616.00 W \$7,080.84 W
	Stepan Stepanyan (Phys)		16 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	Ken Moffeit (Phys) Marco Oriunno (ME)		16 hrs 40 hrs	0	0	\$0.00 \$7,344.00	\$0.00 \$7.344.00	\$0.00 \$9,547.20	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$9,547.20	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$9,547.20 W
8 1.1.6	1.1.6 SVT Collimator Protection		176 hrs	0	0	\$24,431.84	\$9,531.84	\$12,391.39		\$19,370.00		\$0.00	\$0.00	\$0.00	\$0.00	\$31,761.39 _W
	ME Accelerator JLAB		32 hrs	0	0	\$3,554.24	\$3,554.24	\$4,620.51	\$0.00	\$0.00	\$4,620.51	\$0.00	\$0.00	\$0.00	\$0.00	\$4,620.51 W
	MT Accelerator JLAB		80 hrs	0	0	\$5,977.60	\$5,977.60	\$7,770.88	\$0.00	\$0.00	\$7,770.88	\$0.00	\$0.00	\$0.00	\$0.00	\$7,770.88 W
	SVT Collimator Protection Stepan Stepanyan (Phys)		32 hrs	0	0	\$14,900.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$14,900.00 \$0.00	\$19,370.00 \$0.00	\$19,370.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$19,370.00 W \$0.00 W
	Ken Moffeit (Phys)		32 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
9 1.1.7	1.1.7 Vacuum beam line downstream of chicane		32 hrs	0	0	\$14,900.00	\$0.00	\$0.00		\$19,370.00		\$0.00	\$0.00	\$0.00	\$0.00	\$19,370.00 _W
	Vacuum beamline downstream chicane Stepan Stepanyan (Phys)		16 hrs	0	0	\$14,900.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$14,900.00 \$0.00	\$19,370.00 \$0.00	\$19,370.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$19,370.00 W \$0.00 W
	Ken Moffeit (Phys)		16 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
10 1.1.8	1.1.8 Beam Offset Monitor		128 hrs	0	0	\$12,224.72	\$7,754.72	\$10,081.14	\$4,470.00	\$5,811.00		\$0.00	\$0.00	\$0.00	\$5,811.00	\$10,081.14 _W
	Beam Offset Monitor	INFRA	1	0	0	\$4,470.00	\$0.00	\$0.00	\$4,470.00	\$5,811.00	\$5,811.00	\$0.00	\$0.00	\$0.00	\$5,811.00	\$0.00 W
	ME Hall-B MT Hall-B		16 hrs 80 hrs	0	0	\$1,777.12 \$5,977.60	\$1,777.12 \$5,977.60	\$2,310.26 \$7,770.88	\$0.00 \$0.00	\$0.00 \$0.00	\$2,310.26 \$7,770.88	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,310.26 W \$7,770.88 W
	Stepan Stepanyan (Phys)		32 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
11 1.1.15	1.1.9 Beam Profile Monitor		64 hrs	0	0	\$10,430.00	\$0.00	\$0.00		\$13,559.00		\$0.00	\$0.00	\$0.00	\$0.00	\$13,559.00 _W
	Insertable YAG Viewer Stepan Stepanyan (Phys)		32 hrs	0	0	\$10,430.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$10,430.00 \$0.00	\$13,559.00 \$0.00	\$13,559.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$13,559.00 W \$0.00 W
	Ken Moffeit (Phys)		32 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
12 1.1.9	1.1.10 Frascati Vacuum Chamber		24 hrs	0	0	\$14,900.00	\$0.00	\$0.00	\$14,900.00	\$19,370.00	\$19,370.00	\$0.00	\$0.00	\$0.00	\$0.00	\$19,370.00 _W
	Frascati beampipe 2		1 24 hrs	0	0	\$14,900.00 \$0.00	\$0.00	\$0.00 \$0.00	\$14,900.00	\$19,370.00	\$19,370.00 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$19,370.00 W
13 1.1.10	Stepan Stepanyan (Phys) 1.1.11 Photon Dump & Shielding		176 hrs	0	0	\$26,837.60	<i>\$0.00</i> \$5,977.60	\$7,770.88	<i>\$0.00</i> \$20,860.00	<i>\$0.00</i> \$27,118.00		<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 W \$34,888.88
	Photon Dump & Shielding		1	0	0	\$20,860.00	\$0.00	\$0.00	\$20,860.00	\$27,118.00	\$27,118.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27,118.00 W
	MD Hall-B		80 hrs	0	0	\$5,977.60	\$5,977.60	\$7,770.88	\$0.00	\$0.00	\$7,770.88	\$0.00	\$0.00	\$0.00	\$0.00	\$7,770.88 W
14 1.1.11	Stepan Stepanyan (Phys) 1.1.12 Installation review		96 hrs 0 hrs	0	0	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
15 1.1.12	1.1.13 HPS Beamline Installation		152 hrs	0	0	\$6,866.16	\$6,866.16	\$8,926.01	\$0.00	\$0.00		\$0.00		\$0.00	\$0.00	\$8,926.01
	Stepan Stepanyan (Phys)		32 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	Ken Moffeit (Phys)		32 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	ME Hall-B MT Hall-B		8 hrs 80 hrs	0	0	\$888.56 \$5,977.60	\$888.56 \$5,977.60	\$1,155.13 \$7,770.88	\$0.00 \$0.00	\$0.00 \$0.00	\$1,155.13 \$7,770.88	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$1,155.13 W \$7,770.88 W
16 1.1.13	1.1.14 Beamline Installed		0 hrs	0	0	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00	\$0.00	\$0.00 W
17 1.2	1.2 SVT		5,311 hrs	0	0	\$506,987.76	\$346,316.76	\$451,984.75	\$160,671.00	\$204,194.20	\$656,178.95	\$8,412.00	\$10,038.00	\$74,827.44	\$42,614.00	\$538,737.51
18 1.2.1	1.2.1 SVT Design Review		0 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19 1.2.2	1.2.2 Layers 1-3		1,060 hrs	0	0	\$80,265.20	\$53,305.20	\$66,193.92	\$26,960.00	\$37,104.00		\$0.00		\$0.00	\$0.00	\$103,297.92 _W
	1.2.2 Layors 1-J															IVV

						WBS	S V470 Fri 5/3/13									
ID WBS	Task Name	Туре	Work	# Spare:	Prototypes	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital Equipments
	Matt McCulloch (MT)		120 hrs	0	0	\$16,340.40	\$16,340.40	\$19,608.48	\$0.00	\$0.00	\$19,608.48	\$0.00	\$0.00	\$0.00	\$0.00	\$19,608.48 W
	Matt Swift (MD)		160 hrs		, 0	\$22,276.80	\$22,276.80	\$28,959.84	\$0.00	\$0.00	\$28,959.84	\$0.00	\$0.00	\$0.00		\$28,959.84 W
	Tensioners		8		,	\$12,960.00	\$0.00	\$0.00	\$12,960.00	\$18,144.00	\$18,144.00	\$0.00	\$0.00	\$0.00		\$18,144.00 W
	Assembly Fixture U Support		2		,	\$1,200.00 \$10,800.00	\$0.00 \$0.00	\$0.00 \$0.00	\$1,200.00 \$10,800.00	\$1,440.00 \$15,120.00	\$1,440.00 \$15,120.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$1,440.00 W \$15,120.00 W
	Cables Fixtures			0	0 0	\$2,000.00	\$0.00	\$0.00	\$2,000.00	\$2,400.00	\$2,400.00	\$0.00	\$0.00	\$0.00		\$2,400.00 W
	Tim Nelson (Phys)		350 hrs	O	0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Per Hansson (Phys)		350 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	Marco Oriunno (ME)		80 hrs		-	\$14,688.00	\$14,688.00	\$17,625.60	\$0.00	\$0.00	\$17,625.60	\$0.00	\$0.00	\$0.00		\$17,625.60 W
20 1.2.3	1.2.3 Layer 1-3 Ready		0 hrs	s (0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 _W
21 1.2.4	1.2.4 Layers 4-6		1,400 hrs	s (0 0	\$120,255.20	\$77,785.20	\$106,671.60	\$42,470.00	\$59,058.00	\$165,729.60	\$7,896.00	\$10,038.00	\$17,934.00	\$0.00	\$147,795.60
	Matt Swift (MD)		160 hrs) 0	\$22,276.80	\$22,276.80	\$28,959.84	\$0.00	\$0.00	\$28,959.84	\$0.00	\$0.00	\$0.00	\$0.00	\$28,959.84 W
	Matt McCulloch (MT)		160 hrs		0 0	\$21,787.20	\$21,787.20	\$30,502.08	\$0.00	\$0.00	\$30,502.08	\$0.00	\$0.00	\$0.00	\$0.00	\$30,502.08 W
	Tung Phan (ET)		40 hrs		0	\$4,345.20	\$4,345.20	\$6,083.28	\$0.00	\$0.00	\$6,083.28	\$0.00	\$0.00	\$0.00	\$0.00	\$6,083.28 W
	FNAL Composite		1	0	, 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Cables Fixtures		1	0	0	\$2,000.00	\$0.00	\$0.00	\$2,000.00	\$2,400.00	\$2,400.00	\$0.00	\$0.00	\$0.00		\$2,400.00 W
	Wirebonding Fixture Tensioners		2 8) 1	\$3,060.00 \$12,960.00	\$0.00 \$0.00	\$0.00	\$3,060.00	\$4,284.00	\$4,284.00 \$18,144.00	\$0.00		\$2,142.00		\$2,142.00 W \$9,072.00 W
	Assembly Fixture		o	2		\$6,000.00	\$0.00	\$0.00 \$0.00	\$12,960.00 \$6,000.00	\$18,144.00 \$8,400.00	\$8,400.00	\$4,536.00 \$3,360.00		\$9,072.00 \$6,720.00		\$9,072.00 W
	U Support		2	_		\$10,800.00	\$0.00	\$0.00	\$10,800.00	\$15,120.00	\$15,120.00	\$0.00	\$0.00	\$0.00		\$15,120.00 W
	Tim Nelson (Phys)		440 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Per Hansson (Phys)		440 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Marco Oriunno (ME)		160 hrs		-	\$29,376.00	\$29,376.00	\$41,126.40	\$0.00	\$0.00	\$41,126.40	\$0.00	\$0.00	\$0.00		\$41,126.40 W
22 4 2 5	Kapton passivation		1	0	-	\$7,650.00	\$0.00	\$0.00	\$7,650.00	\$10,710.00	\$10,710.00	\$0.00	\$0.00	\$0.00		\$10,710.00 W
22 1.2.5	1.2.5 Layer 4-6 Ready		0 hrs	S (0	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 _W
23 1.2.6	1.2.6 Hybrids Assembly & Wirebonding		0 hrs			\$27,000.00	·	\$0.00	\$27,000.00	\$27,000.00	\$27,000.00	\$0.00	\$0.00	\$0.00	·	\$27,000.00 _W
24 1.2.7	Subcontract Santa Cruz		<i>1</i> 321 hrs	5 (0 0	\$27,000.00 \$23,739.12	\$0.00 \$21,579.12	<i>\$0.00</i> \$25,894.94	\$27,000.00 \$2,160.00	\$27,000.00 \$2,592.00	\$27,000.00 \$28,486.94	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00		\$27,000.00 W \$28,486.94 w
	1.2.7 C-Support Matt Swift (MD)		80 hrs		0 0	\$11,138.40	\$11,138.40	\$13,366.08	\$0.00	\$0.00	\$13,366.08	\$0.00	\$0.00	\$0.00		\$13,366.08 W
	Matt McCùlloch (MT)		16 hrs	0	0	\$2,178.72	\$2,178.72	\$2,614.46	\$0.00	\$0.00	\$2,614.46	\$0.00	\$0.00	\$0.00	\$0.00	\$2,614.46 W
	C-support		1	0	-	\$2,160.00	\$0.00	\$0.00	\$2,160.00	\$2,592.00	\$2,592.00	\$0.00	\$0.00	\$0.00		\$2,592.00 W
	Tim Nelson (Phys) Per Hansson (Phys)		90 hrs 90 hrs			\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 W \$0.00 W
	Marco Oriunno (ME)		45 hrs			\$8,262.00	\$8,262.00	\$9,914.40	\$0.00	\$0.00	\$9,914.40	\$0.00	\$0.00	\$0.00		\$9,914.40 W
25 1.2.8	1.2.8 DAQ Support/Cooling		248 hrs		0 0	\$22,085.00	\$18,360.00	\$25,704.00	\$3,725.00	\$5,215.00	\$30,919.00	\$0.00	\$0.00	\$0.00		\$30,919.00 _W
	Matt Swift (MD)		40 hrs	0	0	\$5,569.20	\$5,569.20	\$7,796.88	\$0.00	\$0.00	\$7,796.88	\$0.00	\$0.00	\$0.00		\$7,796.88 W
	Matt McCulloch (MT)		40 hrs		-	\$5,446.80	\$5,446.80	\$7,625.52	\$0.00	\$0.00	\$7,625.52	\$0.00	\$0.00	\$0.00		\$7,625.52 W
	DAQ Support		1	0		\$3,725.00	\$0.00	\$0.00	\$3,725.00	\$5,215.00	\$5,215.00	\$0.00	\$0.00	\$0.00		\$5,215.00 W
	Tim Nelson (Phys) Per Hansson (Phys)		64 hrs 64 hrs			\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 W \$0.00 W
	Marco Oriunno (ME)		40 hrs		, 0	\$7,344.00	\$7,344.00	\$10,281.60	\$0.00	\$0.00	\$10,281.60	\$0.00	\$0.00	\$0.00		\$10,281.60 W
26 1.2.9	1.2.9 Baseplate		440 hrs		0 0	\$23,760.00	\$18,360.00	\$22,032.00	\$5,400.00	\$6,480.00	\$28,512.00	\$0.00		\$0.00		\$28,512.00 _W
	Matt Swift (MD)		40 hrs) 0	\$5,569.20	\$5,569.20	\$6,683.04	\$0.00	\$0.00	\$6,683.04	\$0.00	\$0.00	\$0.00		\$6,683.04 W
	Matt McCulloch (MT)		40 hrs		-	\$5,446.80	\$5,446.80	\$6,536.16	\$0.00	\$0.00	\$6,536.16	\$0.00	\$0.00	\$0.00		\$6,536.16 W
	Baseplate		1	0	0	\$5,400.00	\$0.00	\$0.00	\$5,400.00	\$6,480.00	\$6,480.00	\$0.00	\$0.00	\$0.00		\$6,480.00 W
	Tim Nelson (Phys)		160 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Per Hansson (Phys)		160 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
27 1.2.10	Marco Oriunno (ME)		<i>40 hr</i> s 234 hrs		0 0	\$7,344.00 \$14,993.28	<i>\$7,344.00</i> \$10,673.28	\$8,812.80 \$12,807.94	<i>\$0.00</i> \$4,320.00	<i>\$0.00</i> \$5,184.00	\$8,812.80 \$17,991.94	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00		\$8,812.80 W \$17,991.94 _W
27 1.2.10	1.2.10 Motion Levers				0											Marie Company
	Matt Swift (MD) Matt McCulloch (MT)		40 hrs		0 0	\$5,569.20	\$5,569.20	\$6,683.04	\$0.00	\$0.00	\$6,683.04	\$0.00	\$0.00 \$0.00	\$0.00		\$6,683.04 W \$3,921.70 W
	Flex links		24 hrs 2			\$3,268.08 \$4,320.00	\$3,268.08 \$0.00	\$3,921.70 \$0.00	\$0.00 \$4,320.00	\$0.00 \$5,184.00	\$3,921.70 \$5,184.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00		\$3,921.70 W \$5,184.00 W
	Tim Nelson (Phys)		80 hrs	_	,	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Per Hansson (Phys)		80 hrs		-	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Marco Oriunnò (MÉ)		10 hrs	0	0	\$1,836.00	\$1,836.00	\$2,203.20	\$0.00	\$0.00	\$2,203.20	\$0.00	\$0.00	\$0.00		\$2,203.20 W
28 1.2.11	1.2.11 Vacuum Flanges		304 hrs	s (0 0	\$41,069.60	\$40,269.60	\$56,377.44	\$800.00	\$880.00	\$57,257.44	\$0.00	\$0.00	\$56,377.44	\$0.00	\$880.00 _W
	Matt Swift (MD)	OP	80 hrs	0	0	\$11,138.40	\$11,138.40	\$15,593.76	\$0.00	\$0.00	\$15,593.76	\$0.00	\$0.00	\$15,593.76	\$0.00	\$0.00 W
	Matt McCulloch (MT)	OP	160 hrs			\$21,787.20	\$21,787.20	\$30,502.08	\$0.00	\$0.00	\$30,502.08	\$0.00	\$0.00			\$0.00 W
	8" CF Flange		20.5		-	\$800.00	\$0.00	\$0.00	\$800.00	\$880.00	\$880.00	\$0.00	\$0.00	\$0.00		\$880.00 W
	Tim Nelson (Phys) Per Hansson (Phys)		12 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Marco Oriunno (ME)	OP	12 hrs 40 hrs			\$0.00 \$7,344.00	\$0.00 \$7,344.00	\$0.00 \$10,281.60	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$10,281.60	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$10,281.60		\$0.00 W \$0.00 W
29 1.2.12	1.2.12 Shipping Crates		224 hrs		0 0	\$29,823.56	\$14,767.56	\$17,721.07	\$15,056.00	\$18,067.20	\$35,788.27	\$5.00 \$516.00	\$0.00	\$516.00		\$35,272.27 _W
	Matt Swift (MD)		12 hrs		0	\$1,670.76	\$1,670.76	\$2,004.91	\$0.00	\$0.00	\$2,004.91	\$0.00	\$0.00	\$0.00		\$2,004.91 W
	Matt McCulloch (MT)		80 hrs		0	\$10,893.60	\$10,893.60	\$13,072.32	\$0.00	\$0.00	\$13,072.32	\$0.00	\$0.00	\$0.00		\$13,072.32 W
	Crates		2	0	0	\$10,756.00	\$0.00	\$0.00	\$10,756.00	\$12,907.20	\$12,907.20	\$0.00	\$0.00	\$0.00		\$12,907.20 W

						WBS	V470 Fri 5/3/13									
ID WBS	Task Name	Туре	Work	# Spare	rototyp	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital De
	Tim Nelson (Phys)		60 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	Per Hansson (Phys)		60 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	Marco Oriunno (ME)		12 hrs	(, ,	\$2,203.20	\$2,203.20	\$2,643.84	\$0.00	\$0.00	\$2,643.84	\$0.00	\$0.00	\$0.00		\$2,643.84 W
20 4 2 42	Half-Module Shipping Box		20		-	\$4,300.00	\$0.00	\$0.00	\$4,300.00	\$5,160.00	\$5,160.00	\$516.00	\$0.00	\$516.00		\$4,644.00 W
30 1.2.13	1.2.13 Integration and testing at SLAC		744 hrs		0 0	\$95,967.20	\$63,187.20	\$82,143.36	\$32,780.00	\$42,614.00	\$124,757.36	\$0.00	\$0.00	\$0.00		\$82,143.36 _W
	Matt McCulloch (MT)		320 hrs		, ,	\$43,574.40	\$43,574.40	\$56,646.72	\$0.00	\$0.00	\$56,646.72	\$0.00	\$0.00	\$0.00		\$56,646.72 W
	Marco Oriunno (ME) Survey Technician SLAC		80 hrs 24 hrs		0 0	\$14,688.00 \$4,924.80	\$14,688.00 \$4,924.80	\$19,094.40 \$6,402.24	\$0.00 \$0.00	\$0.00 \$0.00	\$19,094.40 \$6,402.24	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$19,094.40 W \$6,402.24 W
	Tim Nelson (Phys)		160 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0,402.24	\$0.00	\$0.00	\$0.00		\$0,402.24 W
	Per Hansson (Phys)		160 hrs		0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Chiller	INFRA	1	(, ,	\$29,800.00	\$0.00	\$0.00	\$29,800.00	\$38,740.00	\$38,740.00	\$0.00	\$0.00	\$0.00		\$0.00 W
24 4 2 4 4	Equipment for chiller Control	INFRA	10 h ==		0 0	\$2,980.00	\$0.00	\$0.00	\$2,980.00	\$3,874.00	\$3,874.00	\$0.00	\$0.00	\$0.00	\$3,874.00	\$0.00 W
31 1.2.14	1.2.14 SVT tested and ready for shipment		16 hrs		0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 _W
	Tim Nelson (Phys) Per Hansson (Phys)		8 hrs 8 hrs		0 0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
32 1.2.15	1.2.15 Integration at Jlab		320 hrs		0 0	\$28,029.60	\$28,029.60	\$36,438.48	\$0.00	\$0.00	\$36,438.48	\$0.00	\$0.00	\$0.00		\$36,438.48 _W
	Marco Oriunno (ME)		80 hrs		2 0	\$14,688.00	\$14,688.00	\$19,094.40	\$0.00	\$0.00	\$19,094.40	\$0.00	\$0.00	\$0.00		\$19,094.40 W
	Ryan Herbst (EE)		80 hrs		0 0	\$13,341.60	\$13,341.60	\$17,344.08	\$0.00	\$0.00	\$17,344.08	\$0.00	\$0.00	\$0.00		\$17,344.08 W
	Tim Nelson (Phys)		80 hrs	(0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
00 4 0 40	Per Hansson (Phys)		80 hrs		0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
33 1.2.16	1.2.16 SVT Ready For Installation		0 hrs		0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
34 1.3	1.3 SVT DAQ		4,491.2 hrs		0 0	\$608,111.36	\$341,554.16	\$430,545.39	\$264,406.20	\$351,672.88	\$782,218.28	·		\$80,300.26	\$161,765.00	\$540,153.01 _W
35 1.3.1	1.3.1 FE Boards		702.4 hrs		0 0	\$105,891.00	\$60,037.20	\$84,052.08	\$45,853.80	\$64,195.32	\$148,247.40	\$33,090.50	\$3,676.72	\$36,767.22	\$0.00	\$111,480.18 _W
	Tim Nelson (Phys)		171.2 hrs		,	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
36 1.3.1.1	Per Hansson (Phys) 1.3.1.1 ADC		171.2 hrs 0 hrs		0 0	<i>\$0.00</i> \$5,760.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$5,760.00	\$0.00 \$8,064.00	\$0.00 \$8,064.00	\$0.00 \$3,628.80	<i>\$0.00</i> \$403.20	\$0.00 \$4,032.00		\$0.00 W \$4,032.00 W
30 1.3.1.1	ADC		80		0	\$5,760.00	\$0.00	\$0.00	\$5,760.00	\$8,064.00	\$8,064.00	\$3,628.80	\$403.20	\$4,032.00		\$4,032.00 W
37 1.3.1.2	1.3.1.2 FPGA		0 hrs		0 0	\$10,756.00	\$0.00	\$0.00	\$10,756.00	\$15,058.40	\$15,058.40	\$6,776.28	\$752.92	\$7,529.20		\$7,529.20 W
	FPGA		20			\$10,756.00	\$0.00	\$0.00	\$10,756.00	\$15,058.40	\$15,058.40	\$6,776.28	\$752.92	\$7,529.20	\$0.00	\$7,529.20 W
38 1.3.1.3	1.3.1.3 Preamps		0 hrs		0 0	\$2,016.00	\$0.00	\$0.00	\$2,016.00	\$2,822.40	\$2,822.40	\$1,270.08	\$141.12	\$1,411.20	\$0.00	\$1,411.20 W
39 1.3.1.4	Preamp 1.3.1.4 Connector		200 0 hrs		0 10	\$2,016.00 \$430.20	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$2,016.00 \$430.20	\$2,822.40 \$602.28	<i>\$2,822.40</i> \$602.28	\$1,270.08 \$271.03	\$141.12 \$30.11	<i>\$1,411.20</i> \$301.14		\$1,411.20 W \$301.14 W
00 1.0.1.4	Connectors		20		9 1	\$430.20	\$0.00	\$0.00	\$430.20	\$602.28	\$602.28	\$271.03	\$30.11	\$301.14	\$0.00	\$301.14 W
40 1.3.1.5	1.3.1.5 Power		0 hrs		0 0	\$1,075.60	\$0.00	\$0.00	\$1,075.60	\$1,505.84	\$1,505.84	\$677.63	\$75.29	\$752.92	\$0.00	\$752.92 W
44 4 0 4 0	Power		20		9 1	\$1,075.60	\$0.00	\$0.00	\$1,075.60	\$1,505.84	\$1,505.84	\$677.63	\$75.29	\$752.92	\$0.00	\$752.92 W
41 1.3.1.6	1.3.1.6 Board <i>Board</i>		0 hrs 20		0 0	\$21,512.00 \$21,512.00	\$0.00 \$0.00	\$0.00 \$0.00	\$21,512.00 \$21,512.00	\$30,116.80 \$30,116.80	\$30,116.80 \$30,116.80	\$13,552.56 \$13,552.56		\$15,058.40 \$15,058.40	\$0.00 \$0.00	\$15,058.40 W \$15,058.40 W
42 1.3.1.7	1.3.1.7 Assembly		0 hrs		0 0	\$4,304.00	\$0.00	\$0.00	\$4,304.00	\$6,025.60	\$6,025.60	\$2,711.52		\$3,012.80		\$3,012.80 W
	Assembly		20	9	9 1	\$4,304.00	\$0.00	\$0.00	\$4,304.00	\$6,025.60	\$6,025.60	\$2,711.52	\$301.28	\$3,012.80	\$0.00	\$3,012.80 W
43 1.3.1.8	1.3.1.8 Schematic		120 hrs		0 0	\$20,012.40	\$20,012.40	\$28,017.36	\$0.00	\$0.00	\$28,017.36	\$0.00	\$0.00	\$0.00		\$28,017.36 W
44 1.3.1.9	Ben Reese (EE) 1.3.1.9 Firmware		120 hrs 160 hrs		0 0	\$20,012.40 \$26,683.20	\$20,012.40 \$26,683.20	\$28,017.36 \$37,356.48	\$0.00 \$0.00	\$0.00 \$0.00	\$28,017.36 \$37,356.48	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$28,017.36 W \$37,356.48 W
1.5.1.9	Ryan Herbst (EE)		160 hrs		-	\$26,683.20	\$26,683.20	\$37,356.48	\$0.00	\$0.00	\$37,356.48	\$0.00	\$0.00	\$0.00	\$0.00	\$37,356.48 W
45 1.3.1.12	1.3.1.10 Assembly		40 hrs		0 0	\$6,670.80	\$6,670.80	\$9,339.12	\$0.00	\$0.00	\$9,339.12	\$4,202.60	\$466.96	\$4,669.56		\$4,669.56 W
	Ben Reese (EE)		40 hrs			\$6,670.80	\$6,670.80	\$9,339.12	\$0.00	\$0.00	\$9,339.12	\$4,202.60	\$466.96	\$4,669.56	\$0.00	\$4,669.56 W
46 1.3.1.10	1.3.1.11 Testing Ryan Herbst (EE)		40 hrs 40 hrs		0 0	\$6,670.80 \$6,670.80	\$6,670.80 \$6,670.80	\$9,339.12 \$9,339.12	\$0.00 \$0.00	\$0.00 \$0.00	\$9,339.12 \$9,339.12	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$9,339.12 W \$9,339.12 W
47 1.3.11	1.3.2 FE Interface Board		40 hrs		0 0	\$10,155.96	\$8,004.96	\$9,339.12 \$9,605.95	\$0.00 \$0.00	\$0.00 \$0.00	\$9,605.95	\$9,605.95	\$0.00 \$0.00	\$9,605.95		\$9,339.72 W
	Interface Board		1		1 0	\$2,151.00	\$0.00	\$0.00	\$2,151.00	\$2,581.20	\$2,581.20	\$2,581.20	\$0.00	\$2,581.20	\$0.00	\$0.00 W
48 1.3.11.8	1.3.2.1 Schematic		40 hrs		0 0	\$6,670.80	\$6,670.80	\$8,004.96	\$0.00	\$0.00	\$8,004.96	\$8,004.96	\$0.00	\$8,004.96		\$0.00 W
40 4 2 44 0	Ryan Herbst (EE)		40 hrs		0 0	\$6,670.80	\$6,670.80 \$1,334.16	\$8,004.96	\$0.00	\$0.00	\$8,004.96	\$8,004.96	\$0.00	\$8,004.96		\$0.00 W
49 1.3.11.9	1.3.2.2 Assembly Ryan Herbst (EE)		8 hrs <i>8 hr</i> s		3 0	\$1,334.16 \$1,334.16	\$1,334.16 \$1,334.16	\$1,600.99 \$1,600.99	\$0.00 \$0.00	\$0.00 \$0.00	\$1,600.99 \$1,600.99	\$1,600.99 \$1,600.99	\$0.00 \$0.00	\$1,600.99 \$1,600.99		\$0.00 W \$0.00 W
50 1.3.11.10	1.3.2.3 Firmware Design		0 hrs		0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
51 1.3.12	1.3.3 FE Board Tested w/ hybrid		0 hrs		0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
52 1.3.2	1.3.4 Flange Board		264 hrs		0 0	\$38,169.84	\$20,012.40	\$25,349.04	\$18,157.44	\$25,420.42	\$50,769.46	\$6,355.10		\$9,532.66		\$41,236.80 _W
	Tim Nelson (Phys)		72 hrs		, 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
53 1.3.2.1	Per Hansson (Phys) 1.3.4.1 Connector		72 hrs 0 hrs		0 0	<i>\$0.00</i> \$172.80	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$172.80	<i>\$0.00</i> \$241.92	<i>\$0.00</i> \$241.92	<i>\$0.00</i> \$60.48	\$0.00 \$30.24	\$0.00 \$90.72		\$0.00 W \$151.20 W
1.0.2.1	Connector		16		• •	\$172.80	\$0.00	\$0.00	\$172.80	\$241.92	\$241.92	\$60.48	\$30.24	\$90.72	\$0.00	\$151.20 W
54 1.3.2.2	1.3.4.2 Fiber		0 hrs		0 0	\$7,228.00	\$0.00	\$0.00	\$7,228.00	\$10,119.20	\$10,119.20	\$2,529.80	\$1,264.90	\$3,794.70	\$0.00	\$6,324.50 W
55 1.3.2.3	Fiber 1.3.4.3 Power		16 0 hrs		4 2 0 0	<i>\$7,228.00</i> \$430.24	\$0.00 \$0.00	\$0.00 \$0.00	\$7,228.00 \$430.24	\$10,119.20 \$602.34	\$10,119.20 \$602.34	\$2,529.80 \$150.58		\$3,794.70 \$225.88		\$6,324.50 W \$376.46 W
00 1.3.2.3	Power		U IIIS R	2	-	\$430.24 \$430.24	\$0.00	\$0.00 \$0.00	\$430.24 \$430.24	\$602.34	\$602.34	\$150.58 \$150.58	\$75.29 \$75.29	\$225.88	\$0.00 \$0.00	\$376.46 W
56 1.3.2.4	1.3.4.4 Board		0 hrs	_	0 0	\$8,604.80	\$0.00	\$0.00	\$8,604.80	\$12,046.72	\$12,046.72	\$3,011.68	\$1,505.84	\$4,517.52	\$0.00	\$7,529.20 W
	Board		8	2	-	\$8,604.80	\$0.00	\$0.00	\$8,604.80	\$12,046.72	\$12,046.72	\$3,011.68		\$4,517.52	\$0.00	\$7,529.20 W
57 1.3.2.5	1.3.4.5 Assembly		0 hrs		0 0	\$1,721.60	\$0.00	\$0.00	\$1,721.60 \$1,721.60	\$2,410.24	\$2,410.24	\$602.56		\$903.84		\$1,506.40 W
	Assembly		8		1	\$1,721.60	\$0.00	\$0.00	\$1,721.60	\$2,410.24	\$2,410.24	\$602.56	\$301.28	\$903.84	\$0.00	\$1,506.40 W

						WBS \	/470 Fri 5/3/13									
ID WBS	Task Name	Туре		# Protot	ypı	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital De
58 1.3.2.6	1.3.4.6 Schematic		80 hrs	0	0	\$13,341.60	\$13,341.60	\$18,678.24	\$0.00	\$0.00	\$18,678.24	\$0.00	\$0.00	\$0.00	\$0.00	\$18,678.24 W
	Ben Reese (EE)		80 hrs	0	0	\$13,341.60	\$13,341.60	\$18,678.24	\$0.00	\$0.00	\$18,678.24	\$0.00	\$0.00	\$0.00		\$18,678.24 W
59 1.3.2.11	1.3.4.7 Testing Ryan Herbst (EE)		40 hrs 40 hrs	0	0	\$6,670.80 \$6,670.80	\$6,670.80 \$6,670.80	\$6,670.80 \$6,670.80	\$0.00 \$0.00	\$0.00 \$0.00	\$6,670.80 \$6,670.80	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$6,670.80 W \$6,670.80 W
60 1.3.15	1.3.5 Flange DAQ Tested		0 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
61 1.3.3	1.3.6 DAQ		1,640 hrs	0	0	\$259,489.80	\$173,440.80	\$213,465.60	\$86,049.00	\$120,468.60	\$333,934.20	\$7,529.20	\$0.00	\$7,529.20		\$234,549.60
	Tim Nelson (Phys)		300 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 VV
	Per Hansson (Phys)		300 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
62 1.3.3.1	1.3.6.1 SVT COB	MEDA	0 hrs	0	0	\$38,721.00	\$0.00	\$0.00	\$38,721.00	\$54,209.40	\$54,209.40	\$0.00	\$0.00	\$0.00		\$0.00 W
63 1.3.3.2	<i>SVT COB</i> 1.3.6.2 RTM	INFRA	ა 0 hrs	0	0	\$38,721.00 \$16,134.00	\$0.00 \$0.00	\$0.00 \$0.00	\$38,721.00 \$16,134.00	\$54,209.40 \$22,587.60	\$54,209.40 \$22,587.60	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 W \$0.00 W
03 1.3.3.2	RTM	INFRA	3	0	_	\$16,134.00	\$0.00	\$0.00	\$16,134.00	\$22,587.60	\$22,587.60	\$0.00	\$0.00	\$0.00		\$0.00 W
64 1.3.3.3	1.3.6.3 Custom Board		0 hrs	0	0	\$16,134.00	\$0.00	\$0.00	\$16,134.00	\$22,587.60	\$22,587.60	\$7,529.20	\$0.00	\$7,529.20	\$0.00	\$15,058.40 W <i>\$15,058.40</i> W
05 4 0 0 4	Custom Board		3	1	0	\$16,134.00	\$0.00	\$0.00	\$16,134.00	\$22,587.60	\$22,587.60	\$7,529.20	\$0.00	\$7,529.20	\$0.00	\$15,058.40 W
65 1.3.3.4	1.3.6.4 Crates Crates	INFRA	0 hrs	0	0	\$10,756.00 \$10,756.00	\$0.00 \$0.00	\$0.00 \$0.00	\$10,756.00 \$10,756.00	\$15,058.40 \$15,058.40	\$15,058.40 \$15,058.40	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 W \$0.00 W
66 1.3.3.5	1.3.6.5 Fiber Cables	777701	0 hrs	0	0	\$4,304.00	\$0.00	\$0.00	\$4,304.00	\$6,025.60	\$6,025.60	\$0.00	\$0.00	\$0.00		\$6,025.60 W
	Fiber Cables		16	0	0	\$4,304.00	\$0.00	\$0.00	\$4,304.00	\$6,025.60	\$6,025.60	\$0.00	\$0.00	\$0.00	\$0.00	\$6,025.60 W
67 1.3.3.6	1.3.6.6 Schematic		160 hrs	0	0	\$26,683.20	\$26,683.20	\$37,356.48	\$0.00	\$0.00	\$37,356.48	\$0.00	\$0.00	\$0.00		\$37,356.48 W
68 1.3.3.7	Ben Reese (EE) 1.3.6.7 Firmware		160 hrs 320 hrs	0	0	\$2 <i>6</i> , <i>6</i> 83.20 \$53,366.40	\$26,683.20 \$53,366.40	\$37,356.48 \$64,039.68	\$0.00 \$0.00	\$0.00 \$0.00	\$37,356.48 \$64,039.68	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$37,356.48 W \$64,039.68 W
00 1.5.5.7	Ryan Herbst (EE)		160 hrs	0	0	\$26,683.20	\$26,683.20	\$37,356.48	\$0.00	\$0.00	\$37,356.48	\$0.00	\$0.00	\$0.00		\$37,356.48 W
	Ben Reese (EE)		160 hrs	0	0	\$26,683.20	\$26,683.20	\$26,683.20	\$0.00	\$0.00	\$26,683.20	\$0.00	\$0.00	\$0.00	\$0.00	\$26,683.20 W
69 1.3.3.8	1.3.6.8 Software		320 hrs	0	0	\$53,366.40	\$53,366.40	\$64,039.68	\$0.00	\$0.00	\$64,039.68	\$0.00	\$0.00	\$0.00		\$64,039.68 W
	Ryan Herbst (EE) Ben Reese (EE)		160 hrs 160 hrs	0	0	\$26,683.20 \$26,683.20	\$26,683.20 \$26,683.20	\$37,356.48 \$26,683.20	\$0.00 \$0.00	\$0.00 \$0.00	\$37,356.48 \$26,683.20	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$37,356.48 W \$26,683.20 W
70 1.3.3.10	1.3.6.9 Testing		240 hrs	0	0	\$40,024.80	\$40,024.80	\$48,029.76	\$0.00	\$0.00	\$48,029.76	\$0.00	\$0.00	\$0.00		\$48,029.76 W
	Ryan Herbst (EE)		120 hrs	0	0	\$20,012.40	\$20,012.40	\$28,017.36	\$0.00	\$0.00	\$28,017.36	\$0.00	\$0.00	\$0.00		\$28,017.36 W
	Ben Reese (EE)		120 hrs	0	0	\$20,012.40	\$20,012.40	\$20,012.40	\$0.00	\$0.00	\$20,012.40	\$0.00	\$0.00	\$0.00		\$20,012.40 W
71 1.3.14 72 1.3.4	1.3.7 DAQ Full system Test		0 hrs 1,516.8 hrs	0	0	\$0.00 \$61,410.96	\$0.00 \$40,024.80	\$0.00 \$48,029.76	\$0.00 \$21,386.16	\$0.00 \$25,663.39	\$0.00 \$73,693.15	\$0.00 \$7,128.72	\$0.00 \$1,425.74	\$0.00 \$8,554.46		\$0.00 W \$65,138.69 _W
12 1.3.4	1.3.8 Hybrid			-	U	•		·	. ,	. ,	·					Į V V
	Tim Nelson (Phys) Per Hansson (Phys)		158.4 hrs 158.4 hrs	0	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 W \$0.00 W
73 1.3.4.1	1.3.8.1 Hybrid Misc Part		0 hrs	0	0	\$8,871.12	\$0.00	\$0.00	\$8,871.12	\$10,645.34	\$10,645.34	\$2,957.04	\$591.41	\$3,548.45		\$7,096.90 W
	Hybrid Misc Part		36	10	2	\$2,904.12	\$0.00	\$0.00	\$2,904.12	\$3,484.94	\$3,484.94	\$968.04	\$193.61	\$1,161.65	\$0.00	\$2,323.30 W
74 4040	APV25		180		10	\$5,967.00	\$0.00	\$0.00	\$5,967.00	\$7,160.40	\$7,160.40	\$1,989.00	\$397.80	\$2,386.80		\$4,773.60 W
74 1.3.4.2	1.3.8.2 Hybrid Board Hybrid Board		0 hrs 36	0 10	0	\$7,744.32 \$7,744.32	\$0.00 \$0.00	\$0.00 \$0.00	\$7,744.32 \$7,744.32	\$9,293.18 \$9,293.18	\$9,293.18 \$9,293.18	\$2,581.44 \$2,581.44	\$516.29 \$516.29	\$3,097.73 \$3,097.73		\$6,195.46 W \$6,195.46 W
75 1.3.4.3	1.3.8.3 Hybrid Assembly		0 hrs	0	0	\$4,770.72	\$0.00	\$0.00	\$4,770.72	\$5,724.86	\$5,724.86	\$1,590.24	\$318.05	\$1,908.29		\$3,816.58W
	Hybrid Assembly		36	10	2	\$4,770.72	\$0.00	\$0.00	\$4,770.72	\$5,724.86	\$5,724.86	\$1,590.24	\$318.05	\$1,908.29	\$0.00	\$3,816.58 W
76 1.3.4.4	1.3.8.4 Schematic		80 hrs	0	0	\$13,341.60	\$13,341.60	\$16,009.92	\$0.00	\$0.00	\$16,009.92	\$0.00	\$0.00	\$0.00		\$16,009.92 W
77 1.3.4.7	Ryan Herbst (EE) 1.3.8.5 Assembly		<i>80 hr</i> s 120 hrs	0	0	\$13,341.60 \$20,012.40	\$13,341.60 \$20,012.40	\$16,009.92 \$24,014.88	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$16,009.92 \$24.014.88	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00		\$16,009.92 W \$24,014.88 W
11 1.5.4.1	Ryan Herbst (EE)		60 hrs	0	0	\$10,006.20	\$10,006.20	\$12,007.44	\$0.00	\$0.00	\$12,007.44	\$0.00	\$0.00	\$0.00		\$12,007.44 W
	Ben Reese (EE)		60 hrs	0	0	\$10,006.20	\$10,006.20	\$12,007.44	\$0.00	\$0.00	\$12,007.44	\$0.00	\$0.00	\$0.00	\$0.00	\$12,007.44 W
78 1.3.4.5	1.3.8.6 Board Testing		40 hrs	0	0	\$6,670.80	\$6,670.80	\$8,004.96	\$0.00	\$0.00	\$8,004.96	\$0.00	\$0.00	\$0.00		\$8,004.96 W
79 1.3.4.8	Ben Reese (EE) 1.3.8.7 Hybrid qualification		<i>40 hrs</i> 480 hrs	0	0	\$6,670.80 \$0.00	\$6,670.80 \$0.00	\$8,004.96 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$8,004.96 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$8,004.96 W \$0.00 W
7.5 1.5.4.6	Per Hansson (Phys)		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Sho Uemura (Phys)		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
90 1010	Omar Moreno		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
80 1.3.4.9 81 1.3.4.10	1.3.8.8 Single Hybrid qualification 1.3.8.9 Hybrids Testing		0 hrs 480 hrs	0	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 W \$0.00 W
5. 1.5.4.10	Sho Uemura (Phys)		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
	Per Hansson (Phys)		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
92 422	Omar Moreno		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
82 1.3.6	1.3.9 Flex Cable		280 hrs		U	\$42,386.16	\$33,354.00	\$41,358.96	\$9,032.16	\$12,645.02	\$54,003.98	\$0.00	\$0.00	\$0.00		\$54,003.98 _W
	Tim Nelson (Phys)		40 hrs	0	0	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00	\$0.00		\$0.00 W \$0.00 W
83 1.3.6.1	Per Hansson (Phys) 1.3.9.1 Misc Parts		<i>40 hrs</i> 0 hrs	0	0	\$0.00 \$1,290.72	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$1,290.72	<i>\$0.00</i> \$1,807.01	\$0.00 \$1,807.01	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00		\$0.00 W \$1,807.01 W
1.0.0.1	SVT Cable Misc parts		24	0	O	\$1,290.72	\$0.00	\$0.00	\$1,290.72	\$1,807.01	\$1,807.01	\$0.00	\$0.00	\$0.00		\$1,807.01 W
84 1.3.6.2	1.3.9.2 Cable		0 hrs	0	0	\$5,160.00	\$0.00	\$0.00	\$5,160.00	\$7,224.00	\$7,224.00	\$0.00	\$0.00	\$0.00		\$7,224.00 W
05 1000	SVT Cable		24	0	0	\$5,160.00	\$0.00	\$0.00	\$5,160.00	\$7,224.00	\$7,224.00	\$0.00	\$0.00	\$0.00		\$7,224.00 W
85 1.3.6.3	1.3.9.3 Assembly ST Cable Assembly		0 hrs 24	0	0	\$2,581.44 \$2,581.44	\$0.00 \$0.00	\$0.00 \$0.00	\$2,581.44 \$2,581.44	\$3,614.02 \$3,614.02	\$3,614.02 \$3,614.02	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 <i>\$0.00</i>		\$3,614.02 W \$3,614.02 W
86 1.3.6.4	1.3.9.4 Schematic		160 hrs	0	0	\$26,683.20	\$26,683.20	\$32,019.84	\$0.00	\$0.00	\$32,019.84	\$0.00	\$0.00	\$0.00		\$32,019.84W
	Ryan Herbst (EE)		80 hrs	0	0	\$13,341.60	\$13,341.60	\$18,678.24	\$0.00	\$0.00	\$18,678.24	\$0.00	\$0.00	\$0.00	\$0.00	\$18,678.24 W
07 4005	Ben Reese (EE)		80 hrs	0	0	\$13,341.60	\$13,341.60	\$13,341.60	\$0.00	\$0.00	\$13,341.60	\$0.00	\$0.00	\$0.00		\$13,341.60 W
87 1.3.6.5	1.3.9.5 Testing Ryan Herbst (EE)		40 hrs 40 hrs	0	0	\$6,670.80 \$6,670.80	\$6,670.80 \$6,670.80	\$9,339.12 \$9,339.12	\$0.00 \$0.00	\$0.00 \$0.00	\$9,339.12 \$9,339.12	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$9,339.12 W <i>\$9,339.12</i> W
	ryun rioliosi (LL)		TUIIIO		<u> </u>	ψυ,υι υ.υυ	φυ,υτυ.υυ	ψυ,υυσ. 12	ψυ.υυ	ψυ.υυ	ψυ,υυσ. 12	ψυ.υυ	ψυ.υυ	ψυ.υυ	ψυ.υυ	Ψυ,υυσ. 12 ۷۷

						WBS	V470 Fri 5/3/13									
	Task Name	Туре	Work	# Spares	Prototype	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital Equipments
88 1.3.13	1.3.10 Flex Cable w/ hybrid&FE board		0 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
89 1.3.16	1.3.11 Power Supplies & Cables SVT HV Unit	INFRA	0 hrs	S C		\$58,258.00 \$30,460.00	\$0.00 \$0.00	\$0.00 \$0.00	\$58,258.00 \$30,460.00	\$69,909.60 \$36,552.00	\$69,909.60 \$36,552.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 V \$0.00 V
	SVT LV Unit	INFRA	4	0	-	\$14,216.00	\$0.00	\$0.00	\$14,216.00	\$17,059.20	\$17,059.20	\$0.00	\$0.00	\$0.00		\$0.00 V
	Wiener Crate	INFRA	2	0	0	\$13,582.00	\$0.00	\$0.00	\$13,582.00	\$16,298.40	\$16,298.40	\$0.00	\$0.00	\$0.00	\$16,298.40	\$0.00 V
90 1.3.18	1.3.12 HV/LV Cables		40 hrs	_		\$32,349.64	\$6,680.00	\$8,684.00	\$25,669.64	\$33,370.53	\$42,054.53	\$5,793.84		\$8,310.77		\$33,743.76 V
	LV PS connector LV PS connector FE board		9	6	0	\$90.90	\$0.00	\$0.00	\$90.90	\$118.17	\$118.17	\$78.78	\$0.00	\$78.78		\$39.39 V
	LV PS connector FE poard LV PS connector flange side		9	0	0	\$484.02 \$90.72	\$0.00 \$0.00	\$0.00 \$0.00	\$484.02 \$90.72	\$629.23 \$117.94	\$629.23 \$117.94	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$629.23 V \$117.94 V
	LV PS connector flange vacuum side		8	2	1	\$430.40	\$0.00	\$0.00	\$430.40	\$559.52	\$559.52	\$139.88	\$69.94	\$209.82	\$0.00	\$349.70 V
	LV PS wire outside vacuu		2,400	400	0	\$384.00	\$0.00	\$0.00	\$384.00	\$499.20	\$499.20	\$83.20	\$0.00	\$83.20		\$416.00 V
	HV connector flange vacuum side		64		_	\$13,767.68	\$0.00	\$0.00	\$13,767.68	\$17,897.98	\$17,897.98	\$4,474.50	\$2,237.25	\$6,711.74		\$11,186.24 V
	HV connector FE board		18	_	0	\$954.00	\$0.00	\$0.00	\$954.00	\$1,240.20	\$1,240.20	\$0.00	\$0.00	\$0.00		\$1,240.20 V
	HV connector flange HV PS cable incl. connector		8 5		0	\$1,290.72 \$2,300.00	\$0.00 \$0.00	\$0.00 \$0.00	\$1,290.72 \$2,300.00	\$1,677.94 \$2,990.00	\$1,677.94 \$2,990.00	\$419.48 \$598.00	\$209.74 \$0.00	\$629.23 \$598.00		\$1,048.71 V \$2,392.00 V
	HV wire vacuum				0	\$499.20	\$0.00	\$0.00	\$499.20	\$648.96	\$648.96	\$0.00	\$0.00	\$0.00		\$648.96 V
	Flange Board		10		0	\$5,378.00	\$0.00	\$0.00	\$5,378.00	\$6,991.40	\$6,991.40	\$0.00	\$0.00	\$0.00	\$0.00	\$6,991.40 V
	SLAC Cable shop		40 hrs		-	\$6,680.00	\$6,680.00	\$8,684.00	\$0.00	\$0.00	\$8,684.00	\$0.00	\$0.00	\$0.00		\$8,684.00 V
91 1.4	1.4 ECAL		2,924 hrs	0	0	\$36,808.48	\$27,868.48	\$36,229.02	\$8,940.00	\$11,622.00	\$47,851.02	\$0.00	\$0.00	\$0.00	\$0.00	\$47,851.02 _V
92 1.4.1	1.4.1 Fix 2-shorted HV groups on top-left		44 hrs	1	0	\$2,988.80	\$2,988.80	\$3,885.44	\$0.00	\$0.00	\$3,885.44	\$0.00	\$0.00	\$0.00		\$3,885.44 _V
	ET Hall-B JLAB		40 hrs		0	\$2,988.80	\$2,988.80	\$3,885.44	\$0.00	\$0.00	\$3,885.44	\$0.00	\$0.00	\$0.00		\$3,885.44 V
93 1.4.2	Phy 2 ECAL JLAB		4 hrs 24 hrs			<i>\$0.00</i> \$5,960.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$5,960.00	<i>\$0.00</i> \$7,748.00	<i>\$0.00</i> \$7,748.00	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00		\$0.00 V \$7,748.00 _M
95 1.4.2	1.4.2 Order new motherboard		24 1118	, (0		·				· ·		·			Į V
	New Bottom-Left Motherboard		1 24 hrs	0	0	\$5,960.00	\$0.00	\$0.00	\$5,960.00	\$7,748.00	\$7,748.00	\$0.00	\$0.00	\$0.00		\$7,748.00 V
94 1.4.3	Phy 2 ECAL JLAB		24 rirs 256 hrs			<i>\$0.00</i> \$24,879.68	<i>\$0.00</i> \$24,879.68	<i>\$0.00</i> \$32,343.58	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$32,343.58	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 V \$32,343.58
94 1.4.5	1.4.3 New motherboards and amplifiers					, ,					· ·					Į V
	EE Hall-B JLAB New Amplifiers Boards		224 hrs 60		-	\$24,879.68 \$0.00	\$24,879.68 \$0.00	\$32,343.58 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$32,343.58 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$32,343.58 V \$0.00 V
	Phy 2 ECAL JLAB		32 hrs		U	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
95 1.4.4	1.4.4 New pre-amplifier boards		24 hrs	_	-	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
	Ecal Pre-amps		500	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
	Phy 2 ECAL JLAB		24 hrs		-	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
96 1.4.5	1.4.5 Assembling ECAL		160 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
	Phy 2 ECAL JLAB		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
97 1.4.6	1.4.6 Test and Calibrate Ecal		2,080 hrs		-	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
	Phy 2 ECAL JLAB		160 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
	Phy 1 ECAI JLAB		640 hrs		-	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
	Ph1 2 Orsay		640 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
	Phy 1 Orsay		640 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
98 1.4.7	1.4.7 New mounting system		336 hrs	C	0	\$2,980.00	\$0.00	\$0.00	\$2,980.00	\$3,874.00	\$3,874.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,874.00 _V
	ECAL Mounting System		1	0	0	\$2,980.00	\$0.00	\$0.00	\$2,980.00	\$3,874.00	\$3,874.00	\$0.00	\$0.00	\$0.00		\$3,874.00 V
	Phy 2 ECAL JLAB		16 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
	MÉ Orsay		160 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
99 1.4.8	MT Orsay		160 hrs 0 hrs		-	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00		\$0.00 V \$0.00 v
	1.4.8 ECAL Ready for the installation															Į V
100 1.5	1.5 TDAQ		1,200 hrs	0	0	\$125,512.80	\$115,512.80	\$151,055.20	\$10,000.00	\$10,000.00	\$161,055.20	\$0.00	\$0.00	\$0.00		\$151,055.20 _V
101 1.5.1	1.5.1 EPICS information into data stream		160 hrs	C	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 _W
	EE DAQ JLAB		160 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 V
102 1.5.2	1.5.2 Software TDAQ		0 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
103 1.5.3			0 hrs	; (0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	1.5.3 Hardware TDAQ				0											Į V
104 1.5.4	1.5.4 Update firmware on FADC250		160 hrs			\$17,771.20	\$17,771.20	\$21,325.44	\$0.00	\$0.00	\$21,325.44	\$0.00	\$0.00	\$0.00		\$21,325.44 _V
10-11-	Ben Redo (EE)		160 hrs			\$17,771.20	\$17,771.20	\$21,325.44	\$0.00	\$0.00	\$21,325.44	\$0.00	\$0.00	\$0.00		\$21,325.44 V
105 1.5.5	1.5.5 New firmware for cluster finding		320 hrs	S C	0	\$35,542.40	\$35,542.40	\$49,759.36	\$0.00	\$0.00	\$49,759.36	\$0.00	\$0.00	\$0.00	\$0.00	\$49,759.36 _V
	Scott Kenata (EE)		320 hrs		-	\$35,542.40	\$35,542.40	\$49,759.36	\$0.00	\$0.00	\$49,759.36	\$0.00	\$0.00	\$0.00		\$49,759.36 V
106 1.5.6	1.5.6 New firmware for SSP		240 hrs	s C	0	\$26,656.80	\$26,656.80	\$37,319.52	\$0.00	\$0.00	\$37,319.52	\$0.00	\$0.00	\$0.00	\$0.00	\$37,319.52 _V
	Ben Redo (EE)		160 hrs	0	0	\$17,771.20	\$17,771.20	\$24,879.68	\$0.00	\$0.00	\$24,879.68	\$0.00	\$0.00	\$0.00		\$24,879.68 V
	Scott Kenata (EE)		80 hrs		_	\$8,885.60	\$8,885.60	\$12,439.84	\$0.00	\$0.00	\$12,439.84	\$0.00	\$0.00	\$0.00		\$12,439.84 V
107 1.5.7	1.5.7 Trigger monitoring tools		320 hrs	S C	0	\$35,542.40	\$35,542.40	\$42,650.88	\$0.00	\$0.00	\$42,650.88	\$0.00	\$0.00	\$0.00		\$42,650.88 _V
	Ben Redo (EE)		320 hrs		-	\$35,542.40	\$35,542.40	\$42,650.88	\$0.00	\$0.00	\$42,650.88	\$0.00	\$0.00	\$0.00		\$42,650.88 V
108 1.5.9	1.5.8 TDAQ ready		0 hrs		-	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
109 1.5.8	1.5.9 Data Storage Data Storage Tapes 5TB	INFRA	0 hrs <i>40</i>		•	\$10,000.00 \$10,000.00	\$0.00 \$0.00	\$0.00 \$0.00	\$10,000.00 \$10,000.00	\$10,000.00 \$10,000.00	\$10,000.00 \$10,000.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 V \$0.00 V
	Data Storage Tapes STD	IIVERA	40	0	U	φ 10,000.00	Φυ.υυ	φυ.υυ	φ 10,000.00	φ ι υ, υ υ υ υ υ υ	φ 10,000.00	φυ.υυ	φυ.υυ	φυ.υυ	φ10,000.00	φυ.υυ \

WBS V470 Fri 5/3/13 ID WBS Task Name Type Work # Prototyp Cost Labor Ltotal Material Mtotal Total Spares Prototypes Total Total Total Capital																
ID	WBS	Task Name Type			typ C	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital De
110	1.6	1.6 Slow Control	2,008 hrs	Spares 0	0 \$10	06,817.60	\$75,527.60	\$94,409.50	\$31,290.00	\$39,112.50	\$133,522.00	\$0.00	\$0.00		\$27,937.50	\$105,584.50 _W
111	1.6.1	1.6.1 Chiller control programming	92 hrs	0	0 \$8	8,885.60	\$8,885.60	\$11,107.00	\$0.00	\$0.00	\$11,107.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,107.00 W
		EE Accelerator JLAB	80 hrs	0	0 \$8	8,885.60	\$8,885.60	\$11,107.00	\$0.00	\$0.00	\$11,107.00	\$0.00			\$0.00	\$11,107.00 W
112	1.6.2	Hovanes Hegiyan (Phys) 1.6.2 I/O modules for control	12 <i>hrs</i> 80 hrs	0	0 \$2:	\$0.00 22,350.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$22,350.00	\$0.00 \$27,937.50	\$0.00 \$27,937.50	\$0.00 \$0.00			\$0.00 \$27,937.50	\$0.00 W \$0.00 w
		1.0.2 I/O ITIOUUIES TOI COTIII OI I/O Modules for controls INFRA	1	0		2,350.00	\$0.00	\$0.00	\$22,350.00	\$27,937.50	\$27,937.50	\$0.00			\$27,937.50	\$0.00 W
440	1.0.0	Hovanes Hegiyan (Phys)	80 hrs	0	0 (1)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
113	1.6.3	1.6.3 Sensor readout programming Nerses Gevorgyan (EE)	300 hrs	0		13,328.40	\$13,328.40	\$16,660.50	\$0.00	\$0.00	\$16,660.50	\$0.00			\$0.00	\$16,660.50 _W
		Hovanes Hegiyan (Phys)	120 hrs 180 hrs	0	0 \$13	3,328.40 \$0.00	\$13,328.40 \$0.00	\$16,660.50 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$16,660.50 \$0.00	\$0.00 \$0.00			\$0.00 \$0.00	\$16,660.50 W \$0.00 W
114	1.6.4	1.6.4 SVT voltage control	138 hrs	0	0 \$1:	13,328.40	\$13,328.40	\$16,660.50	\$0.00	\$0.00	\$16,660.50	\$0.00			\$0.00	\$16,660.50 _W
		Hovanes Hegiyan (Phys) Nerses Gevorgyan (EE)	18 hrs 120 hrs	0	0 \$13	\$0.00 3,328.40	\$0.00 \$13,328.40	\$0.00 \$16,660.50	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$16,660.50	\$0.00 \$0.00			\$0.00 \$0.00	\$0.00 W \$16,660.50 W
115	1.6.5	1.6.5 ECAL voltage control	118 hrs		0 \$15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00	\$70,000.30 VV
		Hovanes Hegiyan (Phys)	78 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00	\$0.00 W
116	1.6.6	Nerses Gevorgyan (EE)	<i>40 hrs</i> 92 hrs	0	0 \$	\$0.00 \$8,885.60	\$0.00 \$8,885.60	<i>\$0.00</i> \$11,107.00	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$11,107.00	\$0.00 \$0.00			\$0.00 \$0.00	\$0.00 W \$11,107.00 w
110		1.6.6 SVT motor controls EE Accelerator JLAB	80 hrs	0		8,885.60	\$8,885.60	\$11,107.00	\$0.00	\$0.00	\$11,107.00	\$0.00			\$0.00	\$11,107.00 W
		Hovanes Hegiyan (Phys)	12 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
117	1.6.7	1.6.7 Target motor control	46 hrs			\$4,442.80	\$4,442.80	\$5,553.50	\$0.00	\$0.00	\$5,553.50	\$0.00			\$0.00	\$5,553.50 _W
		EE Accelerator JLAB Hovanes Hegiyan (Phys)	40 hrs 6 hrs	0	0 \$4	\$4,442.80	\$4,442.80 \$0.00	\$5,553.50 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$5,553.50 \$0.00	\$0.00 \$0.00			\$0.00 \$0.00	\$5,553.50 W \$0.00 W
118	1.6.8	1.6.8 Software interlock	142 hrs	0	0 \$4	\$4,442.80	\$4,442.80	\$5,553.50	\$0.00	\$0.00	\$5,553.50	\$0.00			\$0.00	\$5,553.50 _W
		EE Accelerator JLAB	40 hrs	0	0 \$4	4,442.80	\$4,442.80	\$5,553.50	\$0.00	\$0.00	\$5,553.50	\$0.00			\$0.00	\$5,553.50 W
119	1.6.9	Hovanes Hegiyan (Phys) 1.6.9 Hardware interlocks	102 hrs 368 hrs	0	0 \$8	\$0.00 \$8,940.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$8,940.00	<i>\$0.00</i> \$11,175.00	<i>\$0.00</i> \$11,175.00	\$0.00 \$0.00			\$0.00 \$0.00	\$0.00 W \$11,175.00 w
		Hardware Interlock Equipments	1	0		8.940.00	\$0.00	\$0.00	\$8,940.00	\$11,175.00	\$11,175.00	\$0.00			\$0.00	\$11,175.00 W
		EE Hall-B JLAB	200 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
120	1.6.10	Hovanes Hegiyan (Phys) 1.6.10 Beamline control screens	<i>168 hr</i> s 160 hrs	0	0 \$4	<i>\$0.00</i> \$4,442.80	<i>\$0.00</i> \$4,442.80	<i>\$0.00</i> \$5,553.50	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$5,553.50	\$0.00 \$0.00			<i>\$0.00</i> <i>\$0.00</i>	\$0.00 W \$5,553.50 w
		Nerses Gevorgyan (EE)	40 hrs	0	0 \$4	4,442.80	\$4,442.80	\$5,553.50	\$0.00	\$0.00	\$5,553.50	\$0.00			\$0.00	\$5,553.50 W
121	1.6.11	Hovanes Hegiyan (Phys)	120 hrs 284 hrs	0	0	\$0.00 \$8,885.60	\$0.00 \$8,885.60	<i>\$0.00</i> \$11,107.00	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$11,107.00	\$0.00 \$0.00			\$0.00 \$0.00	\$0.00 W \$11,107.00 w
121	1.0.11	1.6.11 EPICS Scalers programing Nerses Gevorgyan (EE)	80 hrs	0		8,885.60	\$8,885.60	\$11,107.00	\$0.00	\$0.00	\$11,107.00	\$0.00			\$0.00	\$11,107.00 W
		Hovanes Hegiyan (Phys)	204 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
122	1.6.12	1.6.12 Alarms configuration	46 hrs	0		\$4,442.80	\$4,442.80	\$5,553.50	\$0.00	\$0.00	\$5,553.50	\$0.00			\$0.00	\$5,553.50 _W
		Nerses Gevorgyan (EE) Hovanes Hegiyan (Phys)	40 hrs 6 hrs		0 \$4	\$4,442.80	\$4,442.80 \$0.00	\$5,553.50 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$5,553.50 \$0.00	\$0.00 \$0.00			\$0.00 \$0.00	\$5,553.50 W \$0.00 W
123	1.6.13	1.6.13 Archiving of controls	142 hrs		0	\$4,442.80	\$4,442.80	\$5,553.50	\$0.00	\$0.00	\$5,553.50	\$0.00		\$0.00	\$0.00	\$5,553.50 W
		EE Accelerator JLAB	40 hrs		0 \$4	4,442.80	\$4,442.80	\$5,553.50	\$0.00	\$0.00	\$5,553.50	\$0.00			\$0.00	\$5,553.50 W
124	1.7	Hovanes Hegiyan (Phys) 1.7 Installation & Commissioning	102 hrs 728 hrs		0 \$4	\$0.00 15,244.80	\$0.00 \$45,244.80	\$0.00 \$57,936.96	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$57,936.96	\$0.00 \$0.00			\$0.00 \$0.00	\$0.00 W \$2,937.60
125		1.7 Installation & Commissioning 1.7.1 SVT installation	48 hrs			\$2,937.60	\$2,937.60	\$2,937.60	\$0.00	\$0.00	\$2,937.60	\$0.00			\$0.00	\$2,937.60 W
	-	Marco Oriunno (ME)	16 hrs	0		2,937.60	\$2,937.60	\$2,937.60	\$0.00	\$0.00	\$2,937.60	\$0.00	\$0.00	\$0.00	\$0.00	\$2,937.60 W
		Tim Nelson (Phys) Per Hansson (Phys)	16 hrs 16 hrs		0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00			\$0.00 \$0.00	\$0.00 W \$0.00 W
126	1.7.1	1.7.2 SVT Commissioning OP	120 hrs	0	0 \$0	6,670.80	\$6,670.80	\$8,672.04	\$0.00	\$0.00	\$8,672.04	\$0.00	\$0.00	\$8,672.04	\$0.00	\$0.00 _W
		Ryan Herbst (EE) OP Tim Nelson (Phys) OP	40 hrs 40 hrs	0	0 \$6	\$0.00	\$6,670.80 \$0.00	\$8,672.04 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$8,672.04 \$0.00	\$0.00 \$0.00			\$0.00 \$0.00	\$0.00 W \$0.00 W
		Per Hansson (Phys) OP	40 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
127	1.7.2	1.7.3 ECAL Commissioning OP	120 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$0.00	\$0.00 _W
		ET Orsay OP MT Orsay OP	40 hrs 40 hrs		0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Phy 2 EĆAL JLAB OP	40 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
128	1.7.3	1.7.4 TDAQ Commissioning OP	320 hrs			28,204.80	\$28,204.80	\$36,666.24	\$0.00	\$0.00	\$36,666.24	\$0.00			\$0.00	\$0.00 _W
		EE Hall-B JLAB OP ET Hall-B JLAB OP	80 hrs 80 hrs			8,885.60 5,977.60	\$8,885.60 \$5,977.60	\$11,551.28 \$7,770.88	\$0.00 \$0.00	\$0.00 \$0.00	\$11,551.28 \$7,770.88	\$0.00 \$0.00			\$0.00 \$0.00	\$0.00 W \$0.00 W
		Ryan Herbst (EE) OP	80 hrs	0		3,341.60	\$13,341.60	\$17,344.08	\$0.00	\$0.00	\$17,344.08	\$0.00	\$0.00	\$17,344.08	\$0.00	\$0.00 W
129	1.7 4	Phy 1 JD OP 1.7.5 Slow Control Commissioning OP	<i>80 hr</i> s 120 hrs	0	0 ¢	<i>\$0.00</i> \$7,431.60	<i>\$0.00</i> \$7,431.60	<i>\$0.00</i> \$9,661.08	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$9,661.08	<i>\$0.00</i> \$0.00			<i>\$0.00</i> \$0.00	\$0.00 W \$0.00
		1.7.5 Slow Control Commissioning EE Hall-B JLAB OP OP	40 hrs			4,442.80	\$4,442.80	\$5,775.64	\$0.00	\$0.00	\$5,775.64	\$0.00			\$0.00	\$0.00 W
		ET Hall-B JLAB OP	40 hrs			2,988.80	\$2,988.80	\$3,885.44	\$0.00	\$0.00	\$3,885.44	\$0.00			\$0.00	\$0.00 W

						WBS	V470 Fri 5/3/13									
ID	WBS	Task Name	Туре	Work	# Prototyp Spares	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital De
		Hovanes Hegiyan (Phys)	OP	40 hrs	0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	1.7.5	1.7.6 HPS ready for the beam		0 hrs		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 _W
131		1.8 Electron Running		3,520 hrs		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 _W
132	1.8.1	1.8.1 Beamline Commissioning (2014)		320 hrs	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 _W
		Stepan Stepanyan (Phys)		40 hrs		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Hovanes Hegiyan (Phys) Phy 1 JD		40 hrs 40 hrs	-	φυ.υυ	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Phy 1 M		40 hrs	-	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Ken Moffeit (Phys) Phy 2 ECAL JLAB		40 hrs 40 hrs		Ψ0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Tim Nelson (Phys)		40 hrs	0 (\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
122	1.8.2	Per Hansson (Phys)		<i>40 hr</i> s 320 hrs		\$0.00 \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00
133	1.0.2	1.8.2 Detector Commissioning Run (2014)		40 hrs		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Stepan Stepanyan (Phys) Hovanes Hegiyan (Phys)		40 hrs			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Phy 1 JD		40 hrs	-	φ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Phy 1 M Ken Moffeit (Phys)		40 hrs 40 hrs		φ0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Phy 2 ECAL JLAB		40 hrs	0 (\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Tim Nelson (Phys) Per Hansson (Phys)		40 hrs 40 hrs		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
	1.8.3	1.8.3 Data Run 2.2GeV (2014)		0 hrs	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	1.8.4 1.8.5	1.8.4 Data Run 1.1 GeV (2014)		0 hrs 320 hrs		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00
130	1.0.5	1.8.5 Beamline recommissioning (2015)				· ·				·	·					I V V
		Stepan Stepanyan (Phys) Hovanes Hegiyan (Phys)		40 hrs 40 hrs		φ0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Phy 1 JD		40 hrs	0 (\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Phy 1 M Ken Moffeit (Phys)		40 hrs 40 hrs		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Phy 2 ECAL JLÁB		40 hrs	0 (\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Tim Nelson (Phys) Per Hansson (Phys)		40 hrs 40 hrs	-	φυ.συ	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
137	1.8.6	1.8.6 Data Run (2015)		2,560 hrs		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Stepan Stepanyan (Phys)		320 hrs	0 (\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Hovanes Hegiyan (Phys)		320 hrs		φ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Phy 1 JD Phy 1 M		320 hrs 320 hrs		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Ken Moffeit (Phys)		320 hrs	0 (\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Phy 2 ECAL JLAB Tim Nelson (Phys)		320 hrs 320 hrs		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Per Hansson (Phys)		320 hrs	0 (\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
138		1.9 SLAC Travel Meetings		2,520 hrs		\$73,363.50	\$73,363.50	\$88,036.20	\$0.00	\$0.00	\$88,036.20	\$0.00	\$0.00		\$0.00	\$0.00 _W
139	1.9.1	1.9.1 Consultation 1 at JLAB Rental Car 1	OP	160 hrs <i>40 hr</i> s		\$6,273.00 \$535.50	\$6,273.00 \$535.50	\$7,527.60 \$642.60	\$0.00 \$0.00	\$0.00 \$0.00	\$7,527.60 \$642.60	\$0.00 \$0.00	\$0.00 \$0.00	\$7,527.60 \$642.60	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Marco Oriunno (ME)	OP OP	40 hrs		\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00 W
		Ken Moffeit (Phys)	OP OP	40 hrs	0 (\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00 W
140	1.9.2	Tim Nelson (Phys) 1.9.2 Collaboration Meeting November 2013	OP	40 hrs 440 hrs		\$1,912.50 \$16,371.00	\$1,912.50 \$16,371.00	\$2,295.00 \$19,645.20	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$19,645.20	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$19,645.20	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Rental Car 2	OP	40 hrs	0 (\$535.50	\$535.50	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00	\$0.00 W
		Rental Car 1 Sho Uemura (Phys)	OP OP	40 hrs 40 hrs		\$535.50 \$1,912.50	\$535.50 \$1,912.50	\$642.60 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$642.60 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$642.60 \$2,295.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Ken Moffeit (Phys)	OP	40 hrs	0 (\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00 W
		Matt Graham (Phys) Tim Nelson (Phys)	OP OP	40 hrs 40 hrs		\$1,912.50 \$1,912.50	\$1,912.50 \$1,912.50	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Per Hansson (Phys)	OP	40 hrs		\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00 W
		Takashi Maruyama (Phys)	OP OP	40 hrs		\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00 W
		Ryan Herbst (EE) Marco Oriunno (ME)	OP OP	40 hrs 40 hrs		\$1,912.50 \$1,912.50	\$1,912.50 \$1,912.50	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
4 4 4	4.0.0	John Jaros (Phys)	OP	40 hrs	0 (\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
141	1.9.3	1.9.3 Consultation 2 at JLAB Marco Oriunno (ME)	OP	160 hrs <i>40 hr</i> s		40,	\$6,273.00 \$1,912.50	\$7,527.60 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,527.60 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,527.60 \$2,295.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Ken Moffeit (Phys)	OP	40 hrs	0 (\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00 W
		Tim Nelson (Phys) Rental Car 1	OP OP	40 hrs 40 hrs		\$1,912.50 \$535.50	\$1,912.50 \$535.50	\$2,295.00 \$642.60	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$642.60	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$642.60	\$0.00 \$0.00	\$0.00 W \$0.00 W
142	1.9.4	1.9.4 Collaboration Meeting November 2014		440 hrs	0	\$16,371.00	\$16,371.00	\$19,645.20	\$0.00	\$0.00	\$19,645.20	\$0.00	\$0.00	\$19,645.20	\$0.00	\$0.00 W
		Rental Car 1 Marco Oriunno (ME)	OP OP	40 hrs 40 hrs		\$535.50 \$1,912.50	\$535.50 \$1,912.50	\$642.60 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$642.60 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$642.60 \$2,295.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Ryan Herbst (EE)	OP OP	40 hrs			\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00 W

					WB	S V470 Fri 5/3/13									
ID WBS	Task Name	Туре	Work	# Prototyp	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital Equipments
	Ken Moffeit (Phys)	OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00	\$0.00	\$0.00 W
	Matt Graham (Phys)	OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Tim Nelson (Phys) Per Hansson (Phys)	OP OP	40 hrs 40 hrs	0 0	\$1,912.50 \$1,912.50	\$1,912.50 \$1,912.50	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$2,295.00	\$0.00 \$0.00		\$2,295.00 \$2,295.00		\$0.00 W \$0.00 W
	Takashi Maruyama (Phys)	OP OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Sho Uemura (Phys)	OP OP	40 hrs	0 0		\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Rental Car 2	OP	40 hrs	0 0	\$535.50	\$535.50	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00		\$642.60		\$0.00 W
	John Jaros (Phys)	OP	40 hrs	0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
143 1.9.5	1.9.5 Collaboration Meeting May 2015		440 hrs	0 0	φ.ο,_οο.οο		\$21,940.20	\$0.00	\$0.00	\$21,940.20	\$0.00		\$21,940.20		\$0.00 W
	John Jaros (Phys)	OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Ken Moffeit (Phys)	OP OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Marco Oriunno (ME) Matt Graham (Phys)	OP OP	40 hrs 40 hrs	0 0	\$1,912.50 \$1,912.50	\$1,912.50 \$1,912.50	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,295.00 \$2,295.00		\$0.00 W \$0.00 W
	Per Hansson (Phys)	OP OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Tim Nelson (Phys)	OP OP	40 hrs	0 0		\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Takashi Maruyama (Phys)	OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Sho Uemura (Phys)	OP	40 hrs	0 0	φ1,012.00	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Ryan Herbst (EE)	OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Rental Car 1	OP OP	40 hrs	0 0	φοσο.σσ	\$535.50	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00		\$642.60		\$0.00 W
144 1.9.6	Rental Car 2 1.9.6 Collaboration Meeting November 2015	OP	<i>40 hr</i> s 440 hrs	0 0	\$535.50 \$4,896.00	\$535.50	\$642.60	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$642.60 \$5.975.20	\$0.00 \$0.00		\$642.60 \$5,875.20		\$0.00 W \$0.00 W
144 1.9.6	John Jaros (Phys)	OP	440 hrs	0 0		\$4,896.00 \$0.00	\$5,875.20 \$0.00	\$0.00	\$0.00	\$5,875.20 \$0.00	\$0.00		\$0.00		\$0.00 W
	Ken Moffeit (Phys)	OP OP	40 hrs	0 0		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Marco Oriunno (ME)	OP OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Matt Graham (Phys)	OP	40 hrs	0 0		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Per Hansson (Phys)	OP	40 hrs	0 0	φ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Tim Nelson (Phys)	OP	40 hrs	0 0	φ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Takashi Maruyama (Phys)	OP OP	40 hrs	0 0	40.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Sho Uemura (Phys)	OP OP	40 hrs 40 hrs	0 0	\$0.00 \$1,912.50	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00		\$0.00 \$2,295.00		\$0.00 W \$0.00 W
	Ryan Herbst (EE) Rental Car 1	OP OP	40 hrs	0 0		\$1,912.50 \$535.50	\$2,295.00 \$642.60	\$0.00	\$0.00	\$2,295.00 \$642.60	\$0.00 \$0.00	\$0.00	\$2,295.00 \$642.60		\$0.00 W
	Rental Car 2	OP OP	40 hrs	0 0	\$535.50	\$535.50	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00		\$642.60		\$0.00 W
145 1.9.7	1.9.7 Collaboration Meeting May 2016	0,	440 hrs	0 0			\$5,875.20	\$0.00	\$0.00	\$5,875.20	\$0.00		\$5,875.20		\$0.00 W
	John Jaros (Phys)	OP	40 hrs	0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00 W
	Ken Moffeit (Phys)	OP	40 hrs	0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Marco Oriunno (ME)	OP	40 hrs	0 0	\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Matt Graham (Phys)	OP	40 hrs	0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Per Hansson (Phys) Rvan Herbst (EE)	OP OP	40 hrs 40 hrs	0 0	\$0.00 \$1,912.50	\$0.00 \$1,912.50	\$0.00 \$2,295.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$2,295.00	\$0.00 \$0.00		\$0.00 \$2,295.00		\$0.00 W \$0.00 W
	Sho Uemura (Phys)	OP OP	40 hrs	0 0		\$1,912.30	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Takashi Maruyama (Phys)	OP OP	40 hrs	0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Tim Nelson (Phys)	OP	40 hrs	0 0	· · · · · · · · · · · · · · · · · · ·	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Rental Car 1	OP	40 hrs	0 0	\$535.50	\$535.50	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00	\$0.00	\$642.60		\$0.00 W
	Rental Car 2	OP	40 hrs	0 0	\$535.50	\$535.50	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00		\$642.60		\$0.00 W
146 1.10	1.10 SLAC Travel for Commissioning and Running		4,080 hrs	0 0	\$78,489.00	\$78,489.00	\$112,929.30	\$0.00	\$0.00	\$112,929.30	\$0.00		\$86,796.90		\$26,132.40 _W
147 1.10.1	1.10.1 Integration and Installation SVT at JLAB		640 hrs	0 0	\$18,666.00		\$26,132.40	\$0.00	\$0.00	\$26,132.40	\$0.00		\$0.00		\$26,132.40 W
	Ryan Herbst (EE)		80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,855.60	\$0.00	\$0.00	\$3,855.60	\$0.00	\$0.00	\$0.00		\$3,855.60 W
	Tim Nelson (Phys)		80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,855.60	\$0.00	\$0.00	\$3,855.60	\$0.00		\$0.00		\$3,855.60 W
	Per Hansson (Phys) Takashi Maruyama (Phys)		80 hrs 80 hrs	0 0	\$2,754.00 \$2,754.00	\$2,754.00 \$2,754.00	\$3,855.60 \$3,855.60	\$0.00 \$0.00	\$0.00 \$0.00	\$3,855.60 \$3,855.60	\$0.00 \$0.00		\$0.00 \$0.00		\$3,855.60 W \$3,855.60 W
	Sho Uemura (Phys)		80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,855.60	\$0.00	\$0.00	\$3,855.60	\$0.00		\$0.00		\$3,855.60 W
	Rental Car 1		80 hrs	0 0	\$1,071.00	\$1,071.00	\$1,499.40	\$0.00	\$0.00	\$1,499.40	\$0.00		\$0.00		\$1,499.40 W
	Rental Car 2		80 hrs	0 0	\$1,071.00	\$1,071.00	\$1,499.40	\$0.00	\$0.00	\$1,499.40	\$0.00		\$0.00		\$1,499.40 W
	Marco Oriunno (ME)		80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,855.60	\$0.00	\$0.00	\$3,855.60	\$0.00		\$0.00	\$0.00	\$3,855.60 W
148 1.10.2	1.10.2 Commissioning		560 hrs	0 0			\$22,276.80	\$0.00	\$0.00	\$22,276.80	\$0.00		\$22,276.80		\$0.00 W
	Sho Uemura (Phys)	OP	80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,855.60	\$0.00	\$0.00	\$3,855.60	\$0.00		\$3,855.60		\$0.00 W
	Ken Moffeit (Phys)	OP OP	80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,855.60	\$0.00	\$0.00	\$3,855.60	\$0.00		\$3,855.60		\$0.00 W
	Tim Nelson (Phys) Per Hansson (Phys)	OP OP	80 hrs 80 hrs	0 0	\$2,754.00 \$2,754.00	\$2,754.00 \$2,754.00	\$3,855.60 \$3,855.60	\$0.00 \$0.00	\$0.00 \$0.00	\$3,855.60 \$3,855.60	\$0.00 \$0.00		\$3,855.60 \$3,855.60		\$0.00 W \$0.00 W
	Rental Car 1	OP OP	80 hrs	0 0	\$1,071.00	\$2,754.00	\$1,499.40	\$0.00	\$0.00	\$3,855.60 \$1,499.40	\$0.00		\$3,655.60 \$1,499.40		\$0.00 W
	Rental Car 2	OP OP	80 hrs	0 0	\$1,071.00	\$1,071.00	\$1,499.40	\$0.00	\$0.00	\$1,499.40	\$0.00	\$0.00	\$1,499.40		\$0.00 W
	Takashi Maruyama (Phys)	OP	80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,855.60	\$0.00	\$0.00	\$3,855.60	\$0.00		\$3,855.60		\$0.00 W
149 1.10.3	1.10.3 Commissioning (2014)		400 hrs	0 0		\$9,333.00	\$12,132.90	\$0.00	\$0.00	\$12,132.90	\$0.00		\$12,132.90		\$0.00 W \$0.00 w
	Ken Moffeit (Phys)	OP	80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,580.20	\$0.00	\$0.00	\$3,580.20	\$0.00	\$0.00	\$3,580.20	\$0.00	\$0.00 W
	Takashi Maruyama (Phys)	OP OP	80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,580.20	\$0.00	\$0.00	\$3,580.20	\$0.00		\$3,580.20		\$0.00 W
	Tim Nelson (Phys)	OP OP	80 hrs	0 0	\$2,754.00	\$2,754.00	\$3,580.20	\$0.00	\$0.00	\$3,580.20	\$0.00		\$3,580.20		\$0.00 W
	Rental Car 1	OP	80 hrs	0 0	\$1,071.00	\$1,071.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00		\$1,392.30		\$0.00 W
	Per Hansson (Phys)	OP	80 hrs	0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
150 1.10.4	1.10.4 Run 2.2GeV (2014)		320 hrs	0 0	\$6,579.00		\$8,552.70	\$0.00	\$0.00	\$8,552.70	\$0.00	\$0.00	\$8,552.70	\$0.00	\$0.00 _W
	Rental Car 1	OP	80 hrs	0 0	\$1,071.00	\$1,071.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00 W
	Tionar Gar 1		50 1113		ψ1,011.00	Ψ1,011.00	ψ1,002.00	ψυ.υυ	Ψ0.00	ψ1,002.00	ψ0.00	ψυ.υυ	Ψ1,002.00	ψ0.00	φυ.συ νν

							WBS	V470 Fri 5/3/13									
ID	WBS	Task Name	Туре	Work	# Spare	rototyp	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital De
		Ken Moffeit (Phys)	OP	80 hrs	s <i>(</i>	0	\$2,754.00	\$2,754.00	\$3,580.20	\$0.00	\$0.00	\$3,580.20	\$0.00	\$0.00	\$3,580.20	\$0.00	\$0.00 W
		Per Hansson (Phys)	OP	80 hrs	s (0	\$2,754.00	\$2,754.00	\$3,580.20	\$0.00	\$0.00	\$3,580.20	\$0.00	\$0.00	\$3,580.20	\$0.00	\$0.00 W
		Takashi Maruyama (Phys)	OP	80 hrs	s (0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
151	1.10.5	1.10.5 Run 1.1 GeV (2014)		320 hrs	s (0 (\$1,071.00	\$1,071.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00 W
		Ken Moffeit (Phys)	OP	80 hrs	s (0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Tim Nelson (Phys)	OP	80 hrs	s (0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Rental Car 1	OP	80 hrs	s (0 0	\$1,071.00	\$1,071.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00 W
		Per Hansson (Phys)	OP	80 hrs	s (0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
152	1.10.6	1.10.6 Commissioning (2015)		560 hrs		0 0	\$4,896.00	\$4,896.00	\$13,800.60	\$0.00	\$0.00	\$13,800.60	\$0.00		\$13,800.60	\$0.00	\$0.00 _W
		Ken Moffeit (Phys)	OP	80 hrs	s (0	\$2,754.00	\$2,754.00	\$11,016.00	\$0.00	\$0.00	\$11,016.00	\$0.00	\$0.00	\$11,016.00	\$0.00	\$0.00 W
		Rental Car 1	OP	80 hrs		0	φ1,011.00	\$1,071.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00 W
		Tim Nelson (Phys)	OP	80 hrs	s (0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Per Hansson (Phys)	OP	80 hrs	s (0	ψ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Takashi Maruyama (Phys)	OP	80 hrs		0	φ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Rental Car 2	OP	80 hrs		0	\$1,071.00	\$1,071.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00 W
		Sho Uemura (Phys)	OP	80 hrs		0	φ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
153	1.10.7	1.10.7 Run 2.2 GeV (2015)		640 hrs		0 (\$11,016.00	\$11,016.00	\$14,320.80	\$0.00	\$0.00	\$14,320.80	\$0.00		\$14,320.80	\$0.00	\$0.00 W
		Ken Moffeit (Phys)	OP	160 hrs		0	\$4,437.00	\$4,437.00	\$5,768.10	\$0.00	\$0.00	\$5,768.10	\$0.00	\$0.00	\$5,768.10	\$0.00	\$0.00 W
		Per Hansson (Phys)	OP	160 hrs		0	\$4,437.00	\$4,437.00	\$5,768.10	\$0.00	\$0.00	\$5,768.10	\$0.00	\$0.00	\$5,768.10	\$0.00	\$0.00 W
		Rental Car 1	OP	160 hrs		0	\$2,142.00	\$2,142.00	\$2,784.60	\$0.00	\$0.00	\$2,784.60	\$0.00	\$0.00	\$2,784.60	\$0.00	\$0.00 W
		Takashi Maruyama (Phys)	OP	160 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
154	1.10.8	1.10.8 Run 6.6 GeV (2015)		640 hrs		0 (\$11,016.00	\$11,016.00	\$14,320.80	\$0.00	\$0.00	\$14,320.80	\$0.00		\$14,320.80	\$0.00	\$0.00 _W
		Ken Moffeit (Phys)	OP	160 hrs		0	\$4,437.00	\$4,437.00	\$5,768.10	\$0.00	\$0.00	\$5,768.10	\$0.00	\$0.00	\$5,768.10	\$0.00	\$0.00 W
		Tim Nelson (Phys)	OP	160 hrs		0	\$4,437.00	\$4,437.00	\$5,768.10	\$0.00	\$0.00	\$5,768.10	\$0.00	\$0.00	\$5,768.10	\$0.00	\$0.00 W
		Rental Car 1	OP	160 hrs		0	φ2,112.00	\$2,142.00	\$2,784.60	\$0.00	\$0.00	\$2,784.60	\$0.00	\$0.00	\$2,784.60	\$0.00	\$0.00 W
		Sho Uemura (Phys)	OP	160 hrs		0	φ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
155	1.12	1.11 Project management		4,544.8 hrs		0 (\$128,373.12	\$128,373.12	\$166,885.06	\$0.00	\$0.00	\$166,885.06	\$0.00		\$0.00	\$0.00	\$166,885.06 _W
		Marco Oriunno (ME)		699.2 hrs		0	φ120,010.12	\$128,373.12	\$166,885.06	\$0.00	\$0.00	\$166,885.06	\$0.00	\$0.00	\$0.00	\$0.00	\$166,885.06 W
		John Jaros (Phys)		349.6 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
		Stepan Stepnyan (Phys)		3,496 hrs		0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
156		1.12 UCSC Funds		0 hrs		0 0	\$462,253.00	\$0.00	\$0.00	\$462,253.00	\$462,253.00	\$462,253.00	\$0.00		\$462,253.00	\$0.00	\$0.00 _W
157	1.13.1	1.12.1 UCSC FY13		0 hrs	-	0 (\$53,050.00	\$0.00	\$0.00	\$53,050.00	\$53,050.00	\$53,050.00	\$0.00		\$53,050.00	\$0.00	\$0.00 W
		UCSC FY13	OP	1		0	φοο,σοσ.σο	\$0.00	\$0.00	\$53,050.00	\$53,050.00	\$53,050.00	\$0.00	\$0.00	\$53,050.00	\$0.00	\$0.00 W
158	1.13.2	1.12.2 UCSC FY14		0 hrs	-	0 (Ψ,σ	\$0.00	\$0.00	\$119,378.00	\$119,378.00	\$119,378.00	\$0.00		\$119,378.00	\$0.00	\$0.00 W
		UCSC FY14	OP	1	1 (, ,	φ110,010.00	\$0.00	\$0.00	\$119,378.00	\$119,378.00	\$119,378.00	\$0.00		\$119,378.00	\$0.00	\$0.00 W
159	1.13.3	1.12.3 UCSC FY15		0 hrs	s (-	\$159,475.00	\$0.00	\$0.00	\$159,475.00	\$159,475.00	\$159,475.00	\$0.00		\$159,475.00	\$0.00	\$0.00 W
L		UCSC FY15	OP	1	1 (, ,	\$159,475.00	\$0.00	\$0.00	\$159,475.00	\$159,475.00	\$159,475.00	\$0.00		\$159,475.00	\$0.00	\$0.00 W
160	1.13.4	1.12.4 UCSC FY16		0 hrs	s (-	\$130,350.00	\$0.00	\$0.00	\$130,350.00	\$130,350.00	\$130,350.00	\$0.00		\$130,350.00	\$0.00	\$0.00 W
		UCSC FY16	OP	1	1 () 0	\$130,350.00	\$0.00	\$0.00	\$130,350.00	\$130,350.00	\$130,350.00	\$0.00	\$0.00	\$130,350.00	\$0.00	\$0.00 W