						WBS	V470 Fri 5/3/13									
ID WBS	Task Name	Туре	Work	# Pro	ototyp	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)		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
4 1.1.2	MD Hall-B		120 hrs 0 hrs	0	0	\$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	<i>\$0.00</i> \$0.00	\$11,656.32 W \$0.00
5 1.1.3	1.1.2 Beamline Review		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
3 1.1.3	1.1.3 Frascati beampipe 1		1201113	0	0		<u> </u>	·			, ,		\$0.00	\$0.00	\$0.00	\$9,685.00 W
	Frascati beampipe 1 Stepan Stepanyan (Phys)		64 hrs	0	0	\$7,450.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,450.00 \$0.00	\$9,685.00 \$0.00	\$9,685.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$9,685.00 W
	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 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	\$35,259.12	\$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 \$11,138.40	\$7,344.00 \$11,138.40	\$9,547.20 \$14,479.92	\$0.00 \$0.00	\$0.00 \$0.00	\$9,547.20 \$14,479.92	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$9,547.20 W \$14,479.92 W
	Vacuum Flange hardware		1	0	0	\$1,080.00	\$0.00	\$0.00	\$1,080.00	\$1,404.00	\$1,404.00	\$0.00	\$0.00	\$0.00	\$0.00	\$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
	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 W
7 1.1.5	1.1.5 Electron Target		112 hrs	0	0	\$17,110.80	\$12,790.80	\$16,628.04	\$4,320.00	\$5,616.00	\$22,244.04	\$0.00	\$0.00	\$0.00	\$0.00	\$22,244.04 _W
	ElectronTarget		1	0	0	\$4,320.00	\$0.00	\$0.00	\$4,320.00	\$5,616.00	\$5,616.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,616.00 W
	Matt McCulloch (MT) Stepan Stepanyan (Phys)		40 hrs 16 hrs	0	0	\$5,446.80 \$0.00	\$5,446.80 \$0.00	\$7,080.84 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,080.84 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,080.84 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
	Marco Oriunno (ME)		40 hrs	0	0	\$7,344.00	\$7,344.00	\$9,547.20	\$0.00	\$0.00	\$9,547.20	\$0.00	\$0.00	\$0.00	\$0.00	\$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	\$14,900.00	\$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 SVT Collimator Protection		80 hrs	0	0	\$5,977.60 \$14,900.00	\$5,977.60 \$0.00	\$7,770.88 \$0.00	\$0.00 \$14,900.00	\$0.00 \$19,370.00	\$7,770.88 \$19,370.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,770.88 W \$19,370.00 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
	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	\$14,900.00	\$19,370.00	\$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		16 hrs	0	0	\$1,777.12	\$1,777.12	\$2,310.26	\$0.00	\$0.00	\$2,310.26	\$0.00	\$0.00	\$0.00	\$0.00	\$2,310.26 W
	MT Hall-B Stepan Stepanyan (Phys)		80 hrs 32 hrs	0	0	\$5,977.60 \$0.00	\$5,977.60 \$0.00	\$7,770.88 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,770.88 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,770.88 W \$0.00 W
11 1.1.15	1.1.9 Beam Profile Monitor		64 hrs	0	0	\$10,430.00	\$0.00	\$0.00	\$10,430.00	\$13,559.00		\$0.00	\$0.00	\$0.00	\$0.00	\$13,559.00 W
	Insertable YAG Viewer		1	0	0	\$10,430.00	\$0.00	\$0.00	\$10,430.00	\$13,559.00	\$13,559.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13,559.00 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
12 1.1.9	Ken Moffeit (Phys)		32 hrs 24 hrs	0	0	<i>\$0.00</i> \$14,900.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$14,900.00	\$0.00 \$19,370.00	\$0.00 \$19,370.00	<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 \$19,370.00
	1.1.10 Frascati Vacuum Chamber Frascati beampipe 2		1	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
	Stepan Stepanyan (Phys)		24 hrs	0	0	\$0.00	\$0.00	\$0.00	\$0.00	\$19,370.00	\$19,370.00	\$0.00	\$0.00	\$0.00	\$0.00	\$19,370.00 W
13 1.1.10	1.1.11 Photon Dump & Shielding		176 hrs	0	0	\$26,837.60	\$5,977.60	\$7,770.88	\$20,860.00	\$27,118.00		\$0.00	\$0.00	\$0.00	\$0.00	\$34,888.88 _W
	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	\$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	<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 \$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	\$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	\$1,155.13	\$0.00 \$0.00	\$0.00 \$0.00	\$1,155.13	\$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	\$5,977.60	\$5,977.60 \$0.00	\$7,770.88 \$0.00	\$0.00	\$0.00	<i>\$7,770.88</i> \$0.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$7,770.88 W
17 1.2			5,311 hrs	n	n	\$506,987.76	\$346,316.76	\$451,984.75		\$204,194.20			\$10,038.00	\$74,827.44	\$42,614.00	\$538,737.51
	1.2 SVT		,	0	2	. ,	·	·	· ·			·	·			Į V V
18 1.2.1	1.2.1 SVT Design Review		0 hrs	U	U	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00	\$0.00	\$0.00 _W
19 1.2.2	1.2.2 Layers 1-3		1,060 hrs	0	U	\$80,265.20	\$53,305.20	\$66,193.92	\$26,960.00	\$37,104.00	\$103,297.92	\$0.00	\$0.00	\$0.00	\$0.00	\$103,297.92 _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 Do
	Matt McCulloch (MT)		120 hrs		\$16,340.40	\$16,340.40	\$19,608.48	\$0.00	\$0.00	\$19,608.48	\$0.00		\$0.00	\$0.00	\$19,608.48 W
	Matt Swift (MD)		160 hrs		\$22,276.80	\$22,276.80	\$28,959.84	\$0.00	\$0.00	\$28,959.84	\$0.00		\$0.00		\$28,959.84 W
	Tensioners		8	0 0	\$12,960.00	\$0.00	\$0.00	\$12,960.00	\$18,144.00	\$18,144.00	\$0.00	\$0.00 \$0.00	\$0.00		\$18,144.00 W
	Assembly Fixture U Support		2	0 0	\$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		\$1,440.00 W \$15,120.00 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		\$2,400.00 W
	Tim Nelson (Phys)		350 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)		350 hrs		\$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	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	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 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		\$21,787.20	\$21,787.20	\$30,502.08	\$0.00	\$0.00	\$30,502.08	\$0.00		\$0.00		\$30,502.08 W
	Tung Phan (ET)		40 hrs		\$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 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		\$2,400.00 W
	Wirebonding Fixture		2	0 1	\$3,060.00	\$0.00	\$0.00	\$3,060.00	\$4,284.00	\$4,284.00	\$0.00		\$2,142.00		\$2,142.00 W
	Tensioners Assembly Fixture		8	2 2	\$12,960.00 \$6,000.00	\$0.00 \$0.00	\$0.00 \$0.00	\$12,960.00 \$6,000.00	\$18,144.00 \$8,400.00	\$18,144.00 \$8,400.00	\$4,536.00 \$3,360.00		\$9,072.00 \$6,720.00	\$0.00 \$0.00	\$9,072.00 W \$1,680.00 W
	U Support		2			\$0.00	\$0.00	\$10,800.00	\$15,120.00	\$15,120.00	\$0.00		\$0,720.00		\$1,000.00 W
	Tim Nelson (Phys)		440 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)		440 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)		160 hrs	0 0	\$29,376.00	\$29,376.00	\$41,126.40	\$0.00	\$0.00	\$41,126.40	\$0.00		\$0.00		\$41,126.40 W
	Kapton passivation		1	0 0	φ1,000.00	\$0.00	\$0.00	\$7,650.00	\$10,710.00	\$10,710.00	\$0.00		\$0.00		\$10,710.00 W
22 1.2.5	1.2.5 Layer 4-6 Ready		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
23 1.2.6	1.2.6 Hybrids Assembly & Wirebonding		0 hrs	0 0	\$27,000.00	\$0.00	\$0.00	\$27,000.00	\$27,000.00	\$27,000.00	\$0.00		\$0.00		\$27,000.00 _W
04 407	Subcontract Santa Cruz		1	0 0	\$27,000.00	\$0.00	\$0.00	\$27,000.00	\$27,000.00	\$27,000.00	\$0.00		\$0.00		\$27,000.00 W
24 1.2.7	1.2.7 C-Support		321 hrs	0 0	\$23,739.12	\$21,579.12	\$25,894.94	\$2,160.00	\$2,592.00	\$28,486.94	\$0.00	\$0.00	\$0.00	\$0.00	\$28,486.94 _W
	Matt Swift (MD)		80 hrs		\$11,138.40	\$11,138.40	\$13,366.08	\$0.00	\$0.00	\$13,366.08	\$0.00		\$0.00		\$13,366.08 W
	Matt McCulloch (MT)		16 hrs		\$2,178.72	\$2,178.72	\$2,614.46	\$0.00	\$0.00	\$2,614.46	\$0.00		\$0.00		\$2,614.46 W
	C-support (St.)		1	0 0	\$2,160.00	\$0.00	\$0.00	\$2,160.00	\$2,592.00	\$2,592.00	\$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 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		\$9,914.40 W
25 1.2.8	1.2.8 DAQ Support/Cooling		248 hrs		\$22,085.00	\$18,360.00	\$25,704.00	\$3,725.00	\$5,215.00	\$30,919.00	\$0.00		\$0.00		\$30,919.00
	Matt Swift (MD)		40 hrs		\$5,569.20	\$5,569.20	\$7,796.88	\$0.00	\$0.00	\$7,796.88	\$0.00		\$0.00		\$7,796.88 W
	Matt McCulloch (MT)		40 hrs	0 0	\$5,369.20	\$5,369.20 \$5,446.80	\$7,790.66	\$0.00	\$0.00	\$7,790.88	\$0.00		\$0.00		\$7,790.66 W \$7,625.52 W
	DAQ Support		1	0 0	\$3,725.00	\$0.00	\$0.00	\$3,725.00	\$5,215.00	\$5,215.00	\$0.00		\$0.00		\$5,215.00 W
	Tim Nelson (Phys)		64 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)		64 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)		40 hrs		\$7,344.00	\$7,344.00	\$10,281.60	\$0.00	\$0.00	\$10,281.60	\$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	\$0.00	\$0.00	\$28,512.00 _W
	Matt Swift (MD)		40 hrs		\$5,569.20	\$5,569.20	\$6,683.04	\$0.00	\$0.00	\$6,683.04	\$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		\$6,536.16 W
	Baseplate		160 h	0 0	\$5,400.00	\$0.00	\$0.00	\$5,400.00	\$6,480.00	\$6,480.00	\$0.00		\$0.00		\$6,480.00 W
	Tim Nelson (Phys) Per Hansson (Phys)		160 hrs 160 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 W \$0.00 W
	Marco Oriunno (ME)		40 hrs		\$7,344.00	\$7,344.00	\$8,812.80	\$0.00	\$0.00	\$8,812.80	\$0.00		\$0.00		\$8,812.80 W
27 1.2.10	1.2.10 Motion Levers		234 hrs		\$14,993.28	\$10,673.28	\$12,807.94	\$4,320.00	\$5,184.00	\$17,991.94	\$0.00		\$0.00		\$17,991.94 _W
	Matt Swift (MD)		40 hrs		\$5,569.20	\$5,569.20	\$6,683.04	\$0.00	\$0.00	\$6,683.04	\$0.00		\$0.00		\$6,683.04 W
	Matt McCulloch (MT)		24 hrs		\$3,268.08	\$3,268.08	\$3,921.70	\$0.00	\$0.00	\$3,921.70	\$0.00		\$0.00		\$3,921.70 W
	Flex links		2		\$4,320.00	\$0.00	\$0.00	\$4,320.00	\$5,184.00	\$5,184.00	\$0.00		\$0.00		\$5,184.00 W
	Tim Nelson (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
	Per Hansson (Phys)		80 hrs		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Marco Oriunno (ME)		10 hrs		\$1,836.00	\$1,836.00	\$2,203.20	\$0.00	\$0.00	\$2,203.20	\$0.00		\$0.00		\$2,203.20 W
28 1.2.11	1.2.11 Vacuum Flanges		304 hrs		Ψ11,000.00	\$40,269.60	\$56,377.44	\$800.00	\$880.00	\$57,257.44	\$0.00		\$56,377.44		\$880.00 W
	Matt Swift (MD)	OP	80 hrs		\$11,138.40	\$11,138.40	\$15,593.76	\$0.00	\$0.00	\$15,593.76	\$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		\$30,502.08	\$0.00	\$0.00 W
	8" CF Flange Tim Nelson (Phys)		10 hrs	0 0	φοσο.σσ	\$0.00	\$0.00	\$800.00	\$880.00	\$880.00	\$0.00		\$0.00		\$880.00 W
	Per Hansson (Phys)		12 hrs 12 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 W \$0.00 W
	Marco Oriunno (ME)	OP	40 hrs		\$7,344.00	\$7,344.00	\$10,281.60	\$0.00	\$0.00	\$10,281.60	\$0.00		\$10,281.60		\$0.00 W
29 1.2.12	1.2.12 Shipping Crates	J,	224 hrs	-	\$29,823.56	\$14,767.56	\$17,721.07	\$15,056.00	\$18,067.20	\$35,788.27	\$516.00		\$516.00		\$35,272.27 _W
	Matt Swift (MD)					\$1,670.76	\$2.004.91						\$0.00		\$2,004.91 W
	Matt McCulloch (MT)		12 hrs 80 hrs		\$1,670.76 \$10,893.60	\$1,670.76	\$2,004.91	\$0.00 \$0.00	\$0.00 \$0.00	\$2,004.91 \$13,072.32	\$0.00 \$0.00		\$0.00		\$2,004.91 W \$13,072.32 W
	Crates		2			\$0.00	\$0.00	\$10,756.00	\$12,907.20	\$12,907.20	\$0.00		\$0.00		\$13,072.32 W \$12,907.20 W
					\$. 5,7 55.55	Ψ3.30	ψ0.00	\$. 5,7 55.55	Ç,OOO	Ç,OOO	Ψ0.00	\$5.55	ψ0.00	Ψ0.00	\$,0070 VV

						WBS	V470 Fri 5/3/13									
ID WBS	Task Name	Туре	Work	#	Prototyp	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total	Total	Total Capital
	Tim Nelson (Phys)		60 hrs	Spare	2 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Operations \$0.00	Infrastructures \$0.00	Equipments \$0.00 W
	Per Hansson (Phys)		60 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
	Marco Oriunno (ME)		12 hrs		0 0	\$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
30 1.2.13	Half-Module Shipping Box		20 744 hrs		2 <i>0</i> 0	\$4,300.00 \$95,967.20	<i>\$0.00</i> \$63,187.20	\$0.00 \$82,143.36	\$4,300.00 \$32,780.00	\$5,160.00 \$42,614.00	\$5,160.00 \$124,757.36	\$516.00 \$0.00	<i>\$0.00</i> \$0.00	<i>\$516.00</i> \$0.00		\$4,644.00 W \$82,143.36 w
30 1.2.13	1.2.13 Integration and testing at SLAC															V V
	Matt McCulloch (MT) Marco Oriunno (ME)		320 hrs 80 hrs		0 0	\$43,574.40 \$14,688.00	\$43,574.40 \$14,688.00	\$56,646.72 \$19,094.40	\$0.00 \$0.00	\$0.00 \$0.00	\$56,646.72 \$19,094.40	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$56,646.72 <mark>W</mark> \$19,094.40 W
	Survey Technician SLAC		24 hrs		0 0	\$4,924.80	\$4,924.80	\$6,402.24	\$0.00	\$0.00	\$6,402.24	\$0.00	\$0.00	\$0.00		\$6,402.24 W
	Tim Nelson (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)	INIEDA	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 Equipment for chiller Control	INFRA INFRA			0 0	\$29,800.00 \$2,980.00	\$0.00 \$0.00	\$0.00 \$0.00	\$29,800.00 \$2,980.00	\$38,740.00 \$3,874.00	\$38,740.00 \$3,874.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 W \$0.00 W
31 1.2.14	1.2.14 SVT tested and ready for shipment	77770	16 hrs	3	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)		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 W
	Per Hansson (Phys)		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 W
32 1.2.15	1.2.15 Integration at Jlab		320 hrs	8	0 0	\$28,029.60	\$28,029.60	\$36,438.48	\$0.00	\$0.00	\$36,438.48	\$0.00	\$0.00	\$0.00	\$0.00	\$36,438.48 _W
	Marco Oriunno (ME)		80 hrs		0 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) Per Hansson (Phys)		80 hrs 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 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 W \$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	\$0.00
34 1.3	1.3 SVT DAQ		4,491.2 hrs	3	0 0	\$608,111.36	\$341,554.16	\$430,545.39	\$264,406.20	\$351,672.88	\$782,218.28	\$69,503.31	\$10,796.95	\$80,300.26	\$161,765.00	\$540,153.01
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					\$111,480.18 _W
	Tim Nelson (Phys)		171.2 hrs		2 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)		171.2 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
36 1.3.1.1	1.3.1.1 ADC		0 hrs		0 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
27 1212	ADC 1.3.1.2 FPGA		80 0 hrs		6 <i>4</i>	\$5,760.00 \$10,756.00	\$0.00 \$0.00	\$0.00 \$0.00	\$5,760.00 \$10,756.00	\$8,064.00 \$15,058.40	\$8,064.00 \$15,058.40	\$3,628.80 \$6,776.28	\$403.20 \$752.92	\$4,032.00 \$7,529.20		\$4,032.00 W \$7,529.20 W
37 1.3.1.2	FPGA		20		9 1	\$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	3	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		\$1,411.20 W
	Preamp		200			\$2,016.00	\$0.00	\$0.00	\$2,016.00	\$2,822.40	\$2,822.40	\$1,270.08	\$141.12	\$1,411.20		\$1,411.20 W
39 1.3.1.4	1.3.1.4 Connector Connectors		0 hrs		0 0	\$430.20 \$430.20	\$0.00 \$0.00	\$0.00 \$0.00	\$430.20 \$430.20	\$602.28 \$602.28	\$602.28 \$602.28	\$271.03 \$271.03	\$30.11 \$30.11	\$301.14 \$301.14		\$301.14 <mark>W</mark> \$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		\$752.92 W
	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 \$752.92 W
41 1.3.1.6	1.3.1.6 Board		0 hrs		0 0	\$21,512.00	\$0.00	\$0.00	\$21,512.00	\$30,116.80	\$30,116.80	\$13,552.56		\$15,058.40		\$15,058.40 W
42 1.3.1.7	Board 1.3.1.7 Assembly		20 0 hrs		9 1	\$21,512.00 \$4,304.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$21,512.00 \$4,304.00	\$30,116.80 \$6,025.60	\$30,116.80 \$6,025.60	\$13,552.56 \$2,711.52		\$15,058.40 \$3,012.80	\$0.00 \$0.00	\$15,058.40 W \$3,012.80 W
72 1.0.1.7	Assembly		20		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		\$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	\$0.00	\$28,017.36 W
44 1.3.1.9	Ben Reese (EE)		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
44 1.5.1.9	1.3.1.9 Firmware 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
45 1.3.1.12	1.3.1.10 Assembly		40 hrs	3	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	\$0.00	\$4,669.56 W
10 1 0 1 10	Ben Reese (EE)		40 hrs		8 2	\$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
46 1.3.1.10	1.3.1.11 Testing Ryan Herbst (EE)		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	\$9,605.95	\$0.00	\$0.00	\$9,605.95	\$9,605.95	\$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
49 1.3.11.9	Ryan Herbst (EE) 1.3.2.2 Assembly		40 hrs 8 hrs		0 0	\$6,670.80 \$1,334.16	<i>\$6,670.80</i> \$1,334.16	<i>\$8,004.96</i> \$1,600.99	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$8,004.96 \$1,600.99	\$8,004.96 \$1,600.99	\$0.00 \$0.00	\$8,004.96 \$1,600.99		\$0.00 W \$0.00 W
1.3.11.9	Ryan Herbst (EE)		8 hrs		8 0	\$1,334.16	\$1,334.16	\$1,600.99	\$0.00	\$0.00	\$1,600.99	\$1,600.99	\$0.00	\$1,600.99		\$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 52 1.3.2	1.3.3 FE Board Tested w/ hybrid		0 hrs 264 hrs		0 0	\$0.00 \$38,169.84	\$0.00 \$20,012.40	\$0.00 \$25,349.04	\$0.00 \$18,157.44	\$0.00 \$25,420.42	\$0.00 \$50,769.46	\$0.00 \$6,355.10	\$0.00 \$3,177.55	\$0.00 \$9,532.66		\$0.00 W \$41,236.80
1.3.2	1.3.4 Flange Board															Į V V
	Tim Nelson (Phys) Per Hansson (Phys)		72 hrs 72 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
53 1.3.2.1	1.3.4.1 Connector		0 hrs		0 0	\$172.80	\$0.00	\$0.00	\$172.80	\$241.92	\$241.92	\$60.48	\$30.24	\$90.72	\$0.00	\$151.20 W
	Connector		16		4 2	\$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 Fiber		0 hrs		0 0	\$7,228.00 \$7,228.00	\$0.00 \$0.00	\$0.00 \$0.00	\$7,228.00 \$7,228.00	\$10,119.20 \$10,119.20	\$10,119.20 \$10,119.20	\$2,529.80 \$2,529.80		\$3,794.70 \$3,794.70		\$6,324.50 W \$6,324.50 W
55 1.3.2.3	1.3.4.3 Power		0 hrs		0 0	\$430.24	\$0.00	\$0.00	\$430.24	\$602.34	\$602.34	\$2,529.60		\$3,794.70		\$6,324.50 W
	Power		8	: :	2 1	\$430.24	\$0.00	\$0.00	\$430.24	\$602.34	\$602.34	\$150.58	\$75.29	\$225.88	\$0.00	\$376.46 W
56 1.3.2.4	1.3.4.4 Board		0 hrs	3	0 0	\$8,604.80	\$0.00	\$0.00	\$8,604.80	\$12,046.72	\$12,046.72	\$3,011.68		\$4,517.52		\$7,529.20 W
57 1.3.2.5	Board 1.3.4.5 Assembly		8 0 hrs		0 0	\$8,604.80 \$1,721.60	\$0.00 \$0.00	\$0.00 \$0.00	\$8,604.80 \$1,721.60	\$12,046.72 \$2,410.24	\$12,046.72 \$2,410.24	\$3,011.68 \$602.56		\$4,517.52 \$903.84		\$7,529.20 W \$1,506.40 W
1.5.2.5	Assembly		8		2 1	\$1,721.60	\$0.00	\$0.00	\$1,721.60	\$2,410.24	\$2,410.24	\$602.56	\$301.28	\$903.84		\$1,506.40 W
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						WBS	/470 Fri 5/3/13									
ID	WBS Task Name	Туре	Work	# Spares	Prototype	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	\$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
59	Ben Reese (EE) 1.3.2.11 1.3.4.7 Testing		80 hrs 40 hrs		0 0	\$13,341.60 \$6,670.80	\$13,341.60 \$6,670.80	\$18,678.24 \$6,670.80	\$0.00 \$0.00	\$0.00 \$0.00	\$18,678.24 \$6,670.80	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$18,678.24 W \$6,670.80 W
	Ryan Herbst (EE)		40 hrs	0	_	\$6,670.80	\$6,670.80	\$6,670.80	\$0.00	\$0.00	\$6,670.80	\$0.00	\$0.00	\$0.00	\$0.00	\$6,670.80 W
	1.3.15 1.3.5 Flange DAQ Tested 1.3.3 1.3.6 DAO		0 hrs 1,640 hrs	-		\$0.00 \$259,489.80	\$0.00 \$173,440.80	\$0.00 \$213,465.60	\$0.00 \$86,049.00	\$0.00 \$120,468.60	\$0.00 \$333,934.20	\$0.00 \$7,529.20	\$0.00 \$0.00	\$0.00 \$7,529.20	\$0.00 \$91,855.40	\$0.00 W \$234,549.60 W
	1.3.3		300 hrs		, 0	\$0.00	•	·	·		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 W
	Per Hansson (Phys)		300 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 W
62	1.3.3.1 1.3.6.1 SVT COB		0 hrs	s 0	, ,	\$38,721.00	\$0.00	\$0.00	\$38,721.00	\$54,209.40	\$54,209.40	\$0.00	\$0.00	\$0.00	\$54,209.40	\$0.00 W
63	SVT COB /// 1.3.3.2 1.3.6.2 RTM	INFRA	3 0 hrs	3 0	-	\$38,721.00 \$16,134.00	<i>\$0.00</i> \$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	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$54,209.40 \$22,587.60	\$0.00 W \$0.00 W
- 00		INFRA	3	3 0	Ö	\$16,134.00	\$0.00	\$0.00	\$16,134.00	\$22,587.60	\$22,587.60	\$0.00	\$0.00	\$0.00	\$22,587.60	\$0.00 W
64	1.3.3.3 1.3.6.3 Custom Board		0 hrs	s 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
65	Custom Board 1.3.3.4 1.3.6.4 Crates		ე 0 hrs	s 0	0 0	\$16,134.00 \$10,756.00	\$0.00 \$0.00	\$0.00 \$0.00	\$16,134.00 \$10,756.00	\$22,587.60 \$15,058.40	\$22,587.60 \$15,058.40	\$7,529.20 \$0.00	<i>\$0.00</i> \$0.00	\$7,529.20 \$0.00	\$0.00 \$15,058.40	\$15,058.40 W \$0.00 W
	Crates II	INFRA	2	? 0	0	\$10,756.00	\$0.00	\$0.00	\$10,756.00	\$15,058.40	\$15,058.40	\$0.00	\$0.00	\$0.00	\$15,058.40	\$0.00 W
66	1.3.3.5 1.3.6.5 Fiber Cables Fiber Cables		0 hrs	-		\$4,304.00 \$4,304.00	\$0.00 \$0.00	\$0.00 \$0.00	\$4,304.00 \$4,304.00	\$6,025.60 \$6,025.60	\$6,025.60 \$6,025.60	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$6,025.60 W \$6,025.60 W
67	1.3.3.6 1.3.6.6 Schematic		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
	Ben Reese (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
68	1.3.3.7 1.3.6.7 Firmware Ryan Herbst (EE)		320 hrs 160 hrs			\$53,366.40 \$26,683.20	\$53,366.40 \$26,683.20	\$64,039.68 \$37,356.48	\$0.00 \$0.00	\$0.00 \$0.00	\$64,039.68 \$37,356.48	\$0.00 \$0.00	\$0.00 <i>\$0.00</i>	\$0.00 \$0.00	\$0.00 <i>\$0.00</i>	\$64,039.68 W \$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 160 hrs		-	\$53,366.40 \$26,683.20	\$53,366.40 \$26,683.20	\$64,039.68 \$37,356.48	\$0.00 \$0.00	\$0.00	\$64,039.68 \$37,356.48	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$64,039.68 W \$37,356.48 W
	Ryan Herbst (EE) Ben Reese (EE)		160 hrs		-	\$26,683.20	\$26,683.20	\$26,683.20	\$0.00	\$0.00 \$0.00	\$26,683.20	\$0.00	\$0.00	\$0.00	\$0.00	\$26,683.20 W
70	1.3.3.10 1.3.6.9 Testing		240 hrs	s 0	-	\$40,024.80	\$40,024.80	\$48,029.76	\$0.00	\$0.00	\$48,029.76	\$0.00	\$0.00	\$0.00	\$0.00	\$48,029.76 W
	Ryan Herbst (EE) Ben Reese (EE)		120 hrs 120 hrs		_	\$20,012.40 \$20,012.40	\$20,012.40 \$20,012.40	\$28,017.36 \$20,012.40	\$0.00 \$0.00	\$0.00 \$0.00	\$28,017.36 \$20,012.40	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$28,017.36 W \$20,012.40 W
71	1.3.14 1.3.7 DAQ Full system Test		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
72	1.3.4 1.3.8 Hybrid		1,516.8 hrs	s 0	0	\$61,410.96	\$40,024.80	\$48,029.76	\$21,386.16	\$25,663.39	\$73,693.15	\$7,128.72	\$1,425.74	\$8,554.46	\$0.00	\$65,138.69 _W
	Tim Nelson (Phys)		158.4 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
73	Per Hansson (Phys) 1.3.4.1 1.3.8.1 Hybrid Misc Part		<i>158.4 hrs</i> 0 hrs		0	<i>\$0.00</i> \$8,871.12	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$8,871.12	<i>\$0.00</i> \$10,645.34	<i>\$0.00</i> \$10,645.34	<i>\$0.00</i> \$2,957.04	<i>\$0.00</i> \$591.41	\$0.00 \$3,548.45	\$0.00 \$0.00	\$0.00 W \$7,096.90 W
7.0	Hybrid Misc Part		36		, ,	\$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
7.4	APV25 1.3.4.2 1.3.8.2 Hybrid Board		180			\$5,967.00 \$7,744.32	\$0.00 \$0.00	\$0.00 \$0.00	\$5,967.00 \$7,744.32	\$7,160.40	\$7,160.40	\$1,989.00 \$2,581.44	\$397.80 \$516.29	\$2,386.80	\$0.00 \$0.00	\$4,773.60 W \$6,195.46 W
74	1.3.4.2 1.3.8.2 Hybrid Board Hybrid Board		0 hrs	-		\$7,744.32 \$7,744.32	\$0.00	\$0.00	\$7,744.32	\$9,293.18 \$9,293.18	\$9,293.18 \$9,293.18	\$2,581.44	\$516.29	\$3,097.73 \$3,097.73	\$0.00	\$6,195.46 W
75	1.3.4.3 1.3.8.3 Hybrid Assembly		0 hrs	s 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	\$0.00	\$3,816.58 W
76	Hybrid Assembly 1.3.4.4 1.3.8.4 Schematic		36 80 hrs			<i>\$4,770.72</i> \$13,341.60	\$0.00 \$13,341.60	<i>\$0.00</i> \$16,009.92	\$4,770.72 \$0.00	\$5,724.86 \$0.00	<i>\$5,724.86</i> \$16,009.92	\$1,590.24 \$0.00	\$318.05 \$0.00	\$1,908.29 \$0.00	<i>\$0.00</i> \$0.00	\$3,816.58 W \$16,009.92 W
70	Ryan Herbst (EE)		80 hrs	-	Ö	\$13,341.60	\$13,341.60	\$16,009.92	\$0.00	\$0.00	\$16,009.92	\$0.00	\$0.00	\$0.00	\$0.00	\$16,009.92 W
77	1.3.4.7 1.3.8.5 Assembly		120 hrs		0	\$20,012.40	\$20,012.40	\$24,014.88	\$0.00	\$0.00	\$24,014.88	\$0.00	\$0.00	\$0.00	\$0.00	\$24,014.88 W
	Ryan Herbst (EE) Ben Reese (EE)		60 hrs 60 hrs		0	\$10,006.20 \$10,006.20	\$10,006.20 \$10,006.20	\$12,007.44 \$12,007.44	\$0.00 \$0.00	\$0.00 \$0.00	\$12,007.44 \$12,007.44	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$12,007.44 <mark>W</mark> \$12,007.44 W
78	1.3.4.5 1.3.8.6 Board Testing		40 hrs	s 0		\$6,670.80	\$6,670.80	\$8,004.96	\$0.00	\$0.00	\$8,004.96	\$0.00	\$0.00	\$0.00	\$0.00	\$8,004.96 W
70	Ben Reese (ĒE) 1.3.4.8 1.3.8.7 Hybrid qualification		40 hrs 480 hrs		_	\$6,670.80 \$0.00	\$6,670.80 \$0.00	\$8,004.96 \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$8,004.96 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$8,004.96 W \$0.00 W
19	Per Hansson (Phys)		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
	Sho Uemura (Phys)		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
80	Omar Moreno 1.3.4.9 1.3.8.8 Single Hybrid qualification		160 hrs 0 hrs		0 0	\$0.00 \$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	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
	1.3.4.10 1.3.8.9 Hybrids Testing		480 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
	Sho Uemura (Phys)		160 hrs		-	\$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) Omar Moreno		160 hrs 160 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
82	1.3.9 Flex Cable		280 hrs		0	\$42,386.16	\$33,354.00	\$41,358.96	\$9,032.16	\$12,645.02	\$54,003.98	\$0.00	\$0.00	\$0.00	\$0.00	\$54,003.98 _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
β3	Per Hansson (Phys) 1.3.6.1 1.3.9.1 Misc Parts		40 hrs 0 hrs			\$0.00 \$1,290.72	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$1,290.72	<i>\$0.00</i> \$1,807.01	<i>\$0.00</i> \$1,807.01	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 W \$1,807.01 W
- 63	SVT Cable Misc parts		24			\$1,290.72	\$0.00	\$0.00	\$1,290.72	\$1,807.01	\$1,807.01	\$0.00	\$0.00	\$0.00	\$0.00	\$1,807.01 W
84	1.3.6.2 1.3.9.2 Cable		0 hrs			\$5,160.00	\$0.00	\$0.00	\$5,160.00	\$7,224.00	\$7,224.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,224.00 W
85	SVT Cable 1.3.6.3 1.3.9.3 Assembly		24 0 hrs		-	\$5,160.00 \$2,581.44	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$5,160.00 \$2,581.44	\$7,224.00 \$3,614.02	\$7,224.00 \$3,614.02	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$7,224.00 <mark>W</mark> \$3,614.02 W
	ST Cable Assembly		24	0	Ö	\$2,581.44	\$0.00	\$0.00	\$2,581.44	\$3,614.02	\$3,614.02	\$0.00	\$0.00	\$0.00	\$0.00	\$3,614.02 W
86	1.3.6.4 1.3.9.4 Schematic		160 hrs <i>80 hrs</i>		-	\$26,683.20	\$26,683.20 \$13,341,60	\$32,019.84	\$0.00	\$0.00	\$32,019.84 \$18,678.24	\$0.00	\$0.00	\$0.00	\$0.00	\$32,019.84 W
	Ryan Herbst (EE) Ben Reese (EE)		80 nrs 80 hrs			\$13,341.60 \$13,341.60	\$13,341.60 \$13,341.60	\$18,678.24 \$13,341.60	\$0.00 \$0.00	\$0.00 \$0.00	\$18,678.24 \$13,341.60	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$18,678.24 <mark>W</mark> \$13,341.60 W
87	1.3.6.5 1.3.9.5 Testing		40 hrs	s 0	-	\$6,670.80	\$6,670.80	\$9,339.12	\$0.00	\$0.00	\$9,339.12	\$0.00	\$0.00	\$0.00	\$0.00	\$9,339.12 W
	Ryan Herbst (EE)		40 hrs	0	0	\$6,670.80	\$6,670.80	\$9,339.12	\$0.00	\$0.00	\$9,339.12	\$0.00	\$0.00	\$0.00	\$0.00	\$9,339.12 W

						WBS	S V470 Fri 5/3/13									
ID WBS	Task Name	Туре	Work	# Spare	Prototypo es		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 0	\$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 (0 0	\$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 W \$0.00 W
	SVT LV Unit	INFRA	4	-	, ,	\$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	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		0 0	ψ υ =,υ .υ.υ .	\$6,680.00	\$8,684.00	\$25,669.64	\$33,370.53	\$42,054.53	\$5,793.84		\$8,310.77		\$33,743.76 W
	LV PS connector LV PS connector FE board		9	$\theta = \epsilon$	5 0	\$90.90 \$484.02	\$0.00 \$0.00	\$0.00 \$0.00	\$90.90 \$484.02	\$118.17 \$629.23	\$118.17 \$629.23	\$78.78 \$0.00	\$0.00 \$0.00	\$78.78 \$0.00		\$39.39 W \$629.23 W
	LV PS connector flange side		9		0 0	\$90.72	\$0.00	\$0.00	\$90.72	\$117.94	\$117.94	\$0.00	\$0.00	\$0.00		\$629.23 V \$117.94 V
	LV PS connector flange vacuum side		8	3 2	2 1	\$430.40	\$0.00	\$0.00	\$430.40	\$559.52	\$559.52	\$139.88	\$69.94	\$209.82		\$349.70 W
	LV PS wire outside vacuu		2,400		-	\$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 HV connector FE board		64 18		-	\$13,767.68 \$954.00	\$0.00 \$0.00	\$0.00 \$0.00	\$13,767.68 \$954.00	\$17,897.98 \$1,240.20	\$17,897.98 \$1,240.20	\$4,474.50 \$0.00	\$2,237.25 \$0.00	\$6,711.74 \$0.00	\$0.00 \$0.00	\$11,186.24 W
	HV connector flange		8	3 2		\$1,290.72	\$0.00	\$0.00	\$1,290.72	\$1,677.94	\$1,677.94	\$419.48	\$209.74	\$629.23		\$1,240.20 W \$1,048.71 W
	HV PS cable incl. connector		5	5 1	1 0	\$2,300.00	\$0.00	\$0.00	\$2,300.00	\$2,990.00	\$2,990.00	\$598.00	\$0.00	\$598.00		\$2,392.00 W
	HV wire vacuum		16		, ,	\$499.20	\$0.00	\$0.00	\$499.20	\$648.96	\$648.96	\$0.00	\$0.00	\$0.00		\$648.96 W
	Flange Board SLAC Cable shop		10 40 hrs		,	\$5,378.00 \$6,680.00	\$0.00 \$6,680.00	\$0.00 \$8,684.00	\$5,378.00 \$0.00	\$6,991.40 \$0.00	\$6,991.40 \$8,684.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$6,991.40 W \$8,684.00 W
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 \$0.00		\$47,851.02 ₁₀
			44 hrs		0 0			. ,	\$0.00			\$0.00	\$0.00	·	·	\$3,885.44 ₁₄
92 1.4.1	1.4.1 Fix 2-shorted HV groups on top-left				0 0	\$2,988.80	\$2,988.80	\$3,885.44	.	\$0.00	\$3,885.44	·		\$0.00		ĮV'
	ET Hall-B JLAB Phy 2 ECAL JLAB		40 hrs 4 hrs		0 0	\$2,988.80 \$0.00	\$2,988.80 \$0.00	\$3,885.44 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$3,885.44 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$3,885.44 W \$0.00 W
93 1.4.2	1.4.2 Order new motherboard		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
	New Bottom-Left Motherboard		1	1 0	2 0	\$5.960.00	\$0.00	\$0.00	\$5,960.00	\$7,748.00	\$7,748.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,748.00 W
	Phy 2 ECAL JLAB		24 hrs		0 0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 V
94 1.4.3	1.4.3 New motherboards and amplifiers		256 hrs	s (0 0	\$24,879.68	\$24,879.68	\$32,343.58	\$0.00	\$0.00	\$32,343.58	\$0.00	\$0.00	\$0.00	\$0.00	\$32,343.58 _W
	EE Hall-B JLAB		224 hrs		0	\$24,879.68	\$24,879.68	\$32,343.58	\$0.00	\$0.00	\$32,343.58	\$0.00	\$0.00	\$0.00		\$32,343.58 <mark>W</mark>
	New Amplifiers Boards		60		, ,	\$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	Phy 2 ECAL JLAB		32 hrs 24 hrs		0 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
33 1.4.4	1.4.4 New pre-amplifier boards					·				,		·		\$0.00		Į V
	Ecal Pre-amps Phy 2 ECAL JLAB		500 24 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 W \$0.00 W
96 1.4.5	1.4.5 Assembling ECAL		160 hrs		0 0		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
	Phy 2 ECAL JLAB		160 hrs	3 (2 0	\$0.00	\$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 0		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
	Phy 2 ECAL JLAB		160 hrs	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 V
	Phy 1 ECAI JLAB		640 hrs	s (0	\$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	\$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	Phy 1 Orsay		640 hrs 336 hrs		0 0 0	\$0.00 \$2,980.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	\$0.00 \$2,980.00	\$0.00 \$3,874.00	<i>\$0.00</i> \$3,874.00	<i>\$0.00</i> \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$0.00		\$0.00 W
90 1.4.7	1.4.7 New mounting system ECAL Mounting System		330 1113		•		·	,						<u> </u>		\$3,874.00 W
	Phy 2 ECAL JLAB		16 hrs		0 0	\$2,980.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,980.00 \$0.00	\$3,874.00 \$0.00	\$3,874.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$3,874.00 W \$0.00 W
	ME Orsay		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
	MT Orsay		160 hrs		0	\$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	1.4.8 ECAL Ready for the installation		0 hrs	s (0 0	ψ0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 _V
100 1.5	1.5 TDAQ		1,200 hrs	s (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	\$10,000.00	\$151,055.20 _V
101 1.5.1	1.5.1 EPICS information into data stream		160 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
	EE DAQ JLAB		160 hrs	s C	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	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 _V
103 1.5.3	1.5.3 Hardware TDAQ		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 _M
104 1.5.4	1.5.4 Update firmware on FADC250		160 hrs	s (0 0	\$17,771.20	\$17,771.20	\$21,325.44	\$0.00	\$0.00	\$21,325.44	\$0.00	\$0.00	\$0.00	\$0.00	\$21,325.44
	Ben Redo (EE)		160 hrs	3 (2 0	\$17,771.20	\$17,771.20	\$21,325.44	\$0.00	\$0.00	\$21,325.44	\$0.00	\$0.00	\$0.00	\$0.00	\$21,325.44 V
105 1.5.5	1.5.5 New firmware for cluster finding		320 hrs		0 0	\$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
	Scott Kenata (EE)		320 hrs	3 (0 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
106 1.5.6	1.5.6 New firmware for SSP		240 hrs		0 0	\$26,656.80	\$26,656.80	\$37,319.52	\$0.00	\$0.00	\$37,319.52	\$0.00	\$0.00	\$0.00		\$37,319.52 _M
	Ben Redo (EE)		160 hrs	s (0 0	\$17,771.20	\$17,771.20	\$24,879.68	\$0.00	\$0.00	\$24,879.68	\$0.00	\$0.00	\$0.00	\$0.00	\$24,879.68 V
	Scott Kenata (EE)		80 hrs	6 (0	\$8,885.60	\$8,885.60	\$12,439.84	\$0.00	\$0.00	\$12,439.84	\$0.00	\$0.00	\$0.00	\$0.00	\$12,439.84 V
107 1.5.7	1.5.7 Trigger monitoring tools		320 hrs		0 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
100	Ben Redo (EE)		320 hrs		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
108 1.5.9 109 1.5.8	1.5.8 TDAQ ready 1.5.9 Data Storage		0 hrs 0 hrs		0 0 0 0	\$0.00 \$10,000.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$10,000.00	\$0.00 \$10,000.00	\$0.00 \$10,000.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 <mark>W</mark> \$0.00 W
1.3.δ	Data Storage Tapes 5TB	INFRA	U nrs	-	0 0	\$10,000.00	\$0.00 \$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00		\$0.00 V \$0.00 V
							ψ0.00	\$0.00			,	\$0.00	\$3.00	\$0.00		Ψ0.00

					WBS	S V470 Fri 5/3/13									
ID WBS	Task Name	Туре	Work	# Prototy	p Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total	Total Infrastructures	Total Capital De
110 1.6	1.6 Slow Control		2,008 hrs	Spares 0	0 \$106,817.60	\$75,527.60	\$94,409.50	\$31,290.00	\$39,112.50	\$133,522.00	\$0.00	\$0.00	Operations \$0.00		\$105,584.50
111 1.6.1	1.6.1 Chiller control programming		92 hrs	0	0 \$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
	EE Accelerator JLAB		80 hrs	0	0 \$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
112 1 0 2	Hovanes Hegiyan (Phys)		12 hrs		0 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
112 1.6.2	1.6.2 I/O modules for control	MEDA	80 hrs	0	0 \$22,350.00	\$0.00	\$0.00	\$22,350.00	\$27,937.50	\$27,937.50	\$0.00		\$0.00		\$0.00 W
	I/O Modules for controls Hovanes Hegiyan (Phys)	INFRA	80 hrs	0	0 \$22,350.00 0 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$22,350.00 \$0.00	\$27,937.50 \$0.00	\$27,937.50 \$0.00	\$0.00 \$0.00		\$0.00 \$0.00	\$27,937.50 \$0.00	\$0.00 W \$0.00 W
113 1.6.3	1.6.3 Sensor readout programming		300 hrs	0	0 \$13,328.40	\$13,328.40	\$16,660.50	\$0.00	\$0.00	\$16,660.50	\$0.00	\$0.00	\$0.00	\$0.00	\$16,660.50 _W
	Nerses Gevorgyan (EE)		120 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
114 1.6.4	Hovanes Hegiyan (Phys) 1.6.4 SVT voltage control		180 hrs 138 hrs		0 \$0.00 0 \$13,328.40	\$0.00 \$13,328.40	<i>\$0.00</i> \$16,660.50	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$16,660.50	\$0.00 \$0.00		<i>\$0.00</i> \$0.00		\$0.00 W \$16,660.50
	Hovanes Hegiyan (Phys)		18 hrs		0 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	·	\$0.00		\$0.00 W
	Nerses Gevorgyan (EE)		120 hrs	0	0 \$13,328.40	\$13,328.40	\$16,660.50	\$0.00	\$0.00	\$16,660.50	\$0.00	\$0.00	\$0.00	\$0.00	\$16,660.50 W
115 1.6.5	1.6.5 ECAL voltage control		118 hrs		0 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 _W
	Hovanes Hegiyan (Phys) Nerses Gevorgyan (EE)		78 hrs 40 hrs		0 \$0.00 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 W \$0.00 W
116 1.6.6	1.6.6 SVT motor controls		92 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
	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	\$0.00		\$11,107.00 W
117 1.6.7	Hovanes Hegiyan (Phys)		12 hrs 46 hrs		0 \$0.00 0 \$4,442.80	\$0.00 \$4,442.80	<i>\$0.00</i> \$5,553.50	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$5,553.50	<i>\$0.00</i> \$0.00		<i>\$0.00</i> \$0.00		\$0.00 W \$5,553.50
117 1.0.7	1.6.7 Target motor control EE Accelerator JLAB		40 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
	Hovanes Hegiyan (Phys)		6 hrs		0 \$4,442.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
118 1.6.8	1.6.8 Software interlock		142 hrs	0	0 \$4,442.80	\$4,442.80	\$5,553.50	\$0.00	\$0.00	\$5,553.50	\$0.00	\$0.00	\$0.00	\$0.00	\$5,553.50 _W
	EE Accelerator JLAB		40 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
119 1.6.9	Hovanes Hegiyan (Phys) 1.6.9 Hardware interlocks		102 hrs 368 hrs		0 \$0.00 0 \$8,940.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$8,940.00	<i>\$0.00</i> \$11,175.00	<i>\$0.00</i> \$11,175.00	\$0.00 \$0.00		<i>\$0.00</i> \$0.00		\$0.00 W \$11,175.00 w
	Hardware Interlock Equipments		1	0	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 \$0.00	\$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)		168 hrs 160 hrs		0 \$0.00 0 \$4,442.80	\$0.00 \$4,442.80	<i>\$0.00</i> \$5,553.50	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$5,553.50	\$0.00 \$0.00		<i>\$0.00</i> \$0.00		\$0.00 W \$5,553.50
120 1.0.10	1.6.10 Beamline control screens Nerses Gevorgyan (EE)		40 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
	Hovanes Hegiyan (Phys)		120 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
121 1.6.11	1.6.11 EPICS Scalers programing		284 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
	Nerses Gevorgyan (EE) Hovanes Hegiyan (Phys)		80 hrs 204 hrs		0 \$8,885.60 0 \$0.00	\$8,885.60 \$0.00	\$11,107.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$11,107.00 \$0.00	\$0.00 \$0.00		\$0.00 \$0.00		\$11,107.00 W \$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
	Nerses Gevorgyan (EE)		40 hrs	0	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
123 1.6.13	Hovanes Hegiyan (Phys)		6 hrs 142 hrs		0 \$0.00 0 \$4,442.80	\$0.00 \$4,442.80	<i>\$0.00</i> \$5,553.50	\$0.00 \$0.00	<i>\$0.00</i> \$0.00	\$0.00 \$5,553.50	\$0.00 \$0.00		<i>\$0.00</i> \$0.00		\$0.00 W \$5,553.50
123 1.0.13	1.6.13 Archiving of controls EE Accelerator JLAB		40 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
	Hovanes Hegiyan (Phys)		102 hrs		0 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$5,553.50 W \$0.00 W
124 1.7	1.7 Installation & Commissioning		728 hrs	0	0 \$45,244.80	\$45,244.80	\$57,936.96	\$0.00	\$0.00	\$57,936.96	\$0.00	\$0.00	\$54,999.36	\$0.00	\$2,937.60 _W
125 1.7.6	1.7.1 SVT installation		48 hrs		0 \$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) Tim Nelson (Phys)		16 hrs 16 hrs		0 \$2,937.60 0 \$0.00	\$2,937.60 \$0.00	\$2,937.60 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$2,937.60 \$0.00	\$0.00 \$0.00		\$0.00 \$0.00		\$2,937.60 W \$0.00 W
400 474	Per Hansson (Phys)	0.0	16 hrs		0 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00 W
126 1.7.1	1.7.2 SVT Commissioning	OP	120 hrs		0 \$6,670.80	\$6,670.80	\$8,672.04	\$0.00	\$0.00	\$8,672.04	\$0.00		\$8,672.04		\$0.00 W
	Ryan Herbst (EE) Tim Nelson (Phys)	OP OP	40 hrs 40 hrs		0 \$6,670.80 0 \$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		\$8,672.04 \$0.00	\$0.00 \$0.00	\$0.00 W \$0.00 W
10= 1=0	Per Hansson (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
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 MT Orsay	OP OP	40 hrs 40 hrs		0 \$0.00 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 W \$0.00 W
	Phy 2 ECAL 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		0 \$28,204.80	\$28,204.80	\$36,666.24	\$0.00	\$0.00	\$36,666.24	\$0.00				\$0.00 W
	EE Hall-B JLAB ET Hall-B JLAB	OP OP	80 hrs 80 hrs		0 \$8,885.60 0 \$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		\$11,551.28 \$7,770.88	\$0.00 \$0.00	\$0.00 W \$0.00 W
	Ryan Herbst (EE)	OP	80 hrs	0	0 \$13,341.60	\$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 OP	80 hrs 120 hrs		0 \$0.00 0 \$7,431.60	\$0.00 \$7,431.60	<i>\$0.00</i> \$9,661.08	\$0.00 \$0.00	\$0.00 \$0.00	<i>\$0.00</i> \$9,661.08	<i>\$0.00</i> \$0.00		<i>\$0.00</i> \$9,661.08		\$0.00 W
129 1.7.4	1.7.5 Slow Control Commissioning EE Hall-B JLAB	OP OP	40 hrs	-	0 \$7,431.80 0 \$4,442.80	\$4,442.80	\$5,775.64	\$0.00 \$0.00	\$0.00	\$5,775.64	\$0.00		\$5,775.64	\$0.00	\$0.00 W \$0.00 W
	EE Hall-B JLAB ET Hall-B JLAB	OP	40 nrs 40 hrs		0 \$4,442.80	\$2,988.80	\$3,885.44	\$0.00	\$0.00	\$3,885.44	\$0.00				\$0.00 W

						WBS	V470 Fri 5/3/13									
ID	WBS T	ask Name	Туре	Work	# Prototy Spares	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital D
		Hovanes Hegiyan (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
130	1.7.5	1.7.6 HPS ready for the beam		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
131	1.8	1.8 Electron Running		3,520 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
132	1.8.1	1.8.1 Beamline Commissioning (2014)		320 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
		Stepan Stepanyan (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
		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	\$0.00 W
		Phy 1 JD		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
		Phy 1 M Ken Moffeit (Phys)		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 ECAL JLAB		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
		Tim Nelson (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
400	4.0.0	Per Hansson (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
133	1.8.2	1.8.2 Detector Commissioning Run (2014)		320 hrs		0 \$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	-	0 \$0.00 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 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)		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
		Phy 2 ECAL JLAB		40 hrs 40 hrs	0	0 \$0.00 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 W \$0.00 W
		Tim Nelson (Phys) Per Hansson (Phys)		40 rirs 40 hrs		50.00 50.00	\$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
134	1.8.3	1.8.3 Data Run 2.2GeV (2014)		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
	1.8.4	1.8.4 Data Run 1.1 GeV (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
136	1.8.5	1.8.5 Beamline recommissioning (2015)		320 hrs		0 \$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	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 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)		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 2 ECAL JLAB		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
		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
137	1.8.6	1.8.6 Data Run (2015)		2,560 hrs		0 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		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	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 JD		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 W \$0.00 W
		Phy 1 M Ken Moffeit (Phys)		320 hrs 320 hrs	_	0 \$0.00 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
		Phy 2 ECAL JLÁB		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
		Tim Nelson (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 0	Per Hansson (Phys)		320 hrs 2,520 hrs		\$0.00 0 \$73,363.50	\$0.00 \$73,363.50	\$0.00 \$88,036.20	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$88,036.20	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$88,036.20	\$0.00 \$0.00	\$0.00 W \$0.00
		1.9 SLAC Travel Meetings 1.9.1 Consultation 1 at JLAB														I V V
139	1.9.1	Rental Car 1	OP	160 hrs 40 hrs		0 \$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 <i>\$0.00</i>	\$7,527.60 \$642.60	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Marco Oriunno (ME)	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	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 OP	40 hrs 440 hrs		\$1,912.50 0 \$16,371.00	<i>\$1,912.50</i> \$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	<i>\$0.00</i> \$0.00	\$0.00 W \$0.00 W
140	1.9.2	Rental Car 2	OP OP	40 hrs		5535.50	\$535.50	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00	\$0.00 W
		Rental Car 1	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
		Sho Uemura (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
		Ken Moffeit (Phys) Matt Graham (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
		Tim Nelson (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
		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) Ryan Herbst (EE)	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 \$2,295.00	\$0.00	\$0.00 <mark>W</mark> \$0.00 W
		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	\$0.00 \$0.00	\$0.00 W
		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	00	160 hrs		0 \$6,273.00	\$6,273.00	\$7,527.60	\$0.00	\$0.00	\$7,527.60	\$0.00	\$0.00	\$7,527.60	\$0.00	\$0.00 W
		Marco Oriunno (ME) Ken Moffeit (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
		Tim Nelson (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
4.0	101	Rental Car 1	OP	40 hrs		\$535.50	\$535.50	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00	\$0.00	\$642.60	\$0.00	\$0.00 W
142	1.9.4	1.9.4 Collaboration Meeting November 2014 Rental Car 1	OP	440 hrs 40 hrs		0 \$16,371.00 \$535.50	\$16,371.00 \$535.50	\$19,645.20 \$642.60	\$0.00 \$0.00	\$0.00 \$0.00	\$19,645.20 \$642.60	\$0.00 \$0.00	\$0.00 <i>\$0.00</i>	\$19,645.20 \$642.60	\$0.00 \$0.00	\$0.00 W \$0.00 W
		Marco Oriunno (ME)	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)	OP	40 hrs		\$1,912.50	\$1,912.50	\$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00		\$0.00	\$0.00 W

						WBS V470 Fri 5/3/	13								
ID WBS	Task Name	Туре	Work	# Protot	/p Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital De
	Ken Moffeit (Phys)	OP	40 hrs		0 \$1,91	2.50 \$1,912	50 \$2,295.00	\$0.00	\$0.00	\$2,295.00	\$0.00	\$0.00	\$2,295.00		\$0.00 W
	Matt Graham (Phys)	OP	40 hrs	0	0 \$1,91		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)	OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Per Hansson (Phys)	OP	40 hrs		0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Takashi Maruyama (Phys) Sho Uemura (Phys)	OP OP	40 hrs 40 hrs	0	0 \$1,91 0 \$1.91				\$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
	Rental Car 2	OP OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00 \$642.60	\$0.00		\$2,295.00 \$642.60		\$0.00 W
	John Jaros (Phys)	OP	40 hrs			0.00 \$0			\$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 \$18,28				\$0.00	\$21,940.20	\$0.00		\$21,940.20		\$0.00 W
	John Jaros (Phys)	OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Ken Moffeit (Phys)	OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Marco Oriunno (ME)	OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Matt Graham (Phys) Per Hansson (Phys)	OP OP	40 hrs 40 hrs	0	0 \$1,91 0 \$1,91				\$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
	Tim Nelson (Phys)	OP OP	40 hrs	-	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Takashi Maruyama (Phys)	OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Sho Uemura (Phys)	OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Ryan Herbst (EE)	OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Rental Car 1	OP	40 hrs	0	0 \$53				\$0.00	\$642.60	\$0.00		\$642.60		\$0.00 W
144 106	Rental Car 2	OP	40 hrs	0	0 \$53				\$0.00	\$642.60 \$5.975.20	\$0.00		\$642.60		\$0.00 W
144 1.9.6	1.9.6 Collaboration Meeting November 2015 John Jaros (Phys)	OP	440 hrs <i>40 hr</i> s	0	0 \$4,89	6.00 \$4,896 0.00 \$0			\$0.00 \$0.00	\$5,875.20 \$0.00	\$0.00 \$0.00		\$5,875.20 \$0.00		\$0.00 <mark>W</mark> \$0.00 W
	Ken Moffeit (Phys)	OP	40 hrs	0		0.00 \$0			\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Marco Oriunno (ME)	OP	40 hrs	0	0 \$1,91				\$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	\$0.00	\$0.00 W
	Per Hansson (Phys)	OP	40 hrs	0		0.00 \$0			\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Tim Nelson (Phys)	OP	40 hrs	0		0.00 \$0			\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Takashi Maruyama (Phys) Sho Uemura (Phys)	OP OP	40 hrs 40 hrs	0		0.00 \$0 0.00 \$0			\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		\$0.00 \$0.00		\$0.00 W \$0.00 W
	Ryan Herbst (EE)	OP	40 hrs	0	0 \$1.91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Rental Car 1	OP OP	40 hrs	Ö	0 \$53				\$0.00	\$642.60	\$0.00		\$642.60		\$0.00 W
	Rental Car 2	OP	40 hrs	0	0 \$53				\$0.00	\$642.60	\$0.00		\$642.60		\$0.00 W
145 1.9.7	1.9.7 Collaboration Meeting May 2016		440 hrs		0 \$4,89				\$0.00	\$5,875.20	\$0.00		\$5,875.20		\$0.00 W
	John Jaros (Phys)	OP	40 hrs	0		0.00 \$0			\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Ken Moffeit (Phys) Marco Oriunno (ME)	OP OP	40 hrs 40 hrs		0 \$1.91	0.00 \$0 2.50 \$1,912			\$0.00 \$0.00	\$0.00 \$2,295.00	\$0.00 \$0.00		\$0.00		\$0.00 W \$0.00 W
	Matt Graham (Phys)	OP OP	40 hrs	0		2.50 \$1,912 2.00 \$0			\$0.00	\$2,295.00	\$0.00		\$2,295.00 \$0.00		\$0.00 W
	Per Hansson (Phys)	OP OP	40 hrs	0		0.00 \$0			\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Ryan Herbst (EE)	OP	40 hrs	0	0 \$1,91				\$0.00	\$2,295.00	\$0.00		\$2,295.00		\$0.00 W
	Sho Uemura (Phys)	OP	40 hrs	0		0.00 \$0			\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Takashi Maruyama (Phys)	OP	40 hrs	-		0.00 \$0			\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Tim Nelson (Phys)	OP	40 hrs	0		0.00 \$0			\$0.00	\$0.00	\$0.00		\$0.00		\$0.00 W
	Rental Car 1 Rental Car 2	OP OP	40 hrs 40 hrs	0		5.50 \$535 5.50 \$535			\$0.00 \$0.00	\$642.60 \$642.60	\$0.00 \$0.00		\$642.60 \$642.60		\$0.00 W \$0.00 W
146 1.10		OF .	4,080 hrs		0 \$78,48				\$0.00	\$112,929.30	\$0.00				\$26,132.40 W
	1.10 SLAC Travel for Commissioning and Running														
147 1.10.1	1.10.1 Integration and Installation SVT at JLAB Ryan Herbst (EE)		640 hrs <i>80 hr</i> s		0 \$18,66 0 \$2,75				\$0.00 \$0.00	\$26,132.40 \$3,855.60	\$0.00 \$0.00		\$0.00 \$0.00		\$26,132.40 W \$3,855.60 W
	Tim Nelson (Phys)		80 hrs		0 \$2,75				\$0.00	\$3,855.60	\$0.00		\$0.00 \$0.00		\$3,855.60 W
	Per Hansson (Phys)		80 hrs		0 \$2,75				\$0.00	\$3,855.60	\$0.00		\$0.00		\$3,855.60 W
	Takashi Maruyama (Phys)		80 hrs		0 \$2,75	4.00 \$2,754			\$0.00	\$3,855.60	\$0.00		\$0.00		\$3,855.60 W
	Sho Uemura (Phys)		80 hrs		0 \$2,75				\$0.00	\$3,855.60	\$0.00		\$0.00		\$3,855.60 W
	Rental Car 1		80 hrs		0 \$1,07				\$0.00	\$1,499.40	\$0.00		\$0.00		\$1,499.40 W
	Rental Car 2 Marco Oriunno (ME)		80 hrs 80 hrs		0 \$1,07 0 \$2,75				\$0.00 \$0.00	\$1,499.40 \$3,855.60	\$0.00 \$0.00		\$0.00 \$0.00		\$1,499.40 W \$3,855.60 W
148 1.10.2	1.10.2 Commissioning		560 hrs		0 \$15,91				\$0.00	\$22,276.80	\$0.00		\$22,276.80		\$3,833.60 W
140 1.10.2	Sho Uemura (Phys)	OP	80 hrs		0 \$13,3 0 \$2,75				\$0.00	\$3,855.60	\$0.00		\$3,855.60		\$0.00 W
	Ken Moffeit (Phys)	OP	80 hrs		0 \$2,75	4.00 \$2,754			\$0.00	\$3,855.60	\$0.00		\$3,855.60	\$0.00	\$0.00 W
	Tim Nelson (Phys)	OP	80 hrs		0 \$2,75	4.00 \$2,754	00 \$3,855.60	\$0.00	\$0.00	\$3,855.60	\$0.00		\$3,855.60	\$0.00	\$0.00 W
	Per Hansson (Phys)	OP	80 hrs		0 \$2,75				\$0.00	\$3,855.60	\$0.00		\$3,855.60		\$0.00 W
	Rental Car 1	OP OP	80 hrs		0 \$1,07				\$0.00	\$1,499.40	\$0.00		\$1,499.40		\$0.00 W
	Rental Car 2 Takashi Maruyama (Phys)	OP OP	80 hrs 80 hrs		0 \$1,07 0 \$2,75				\$0.00 \$0.00	\$1,499.40 \$3,855.60	\$0.00 \$0.00		\$1,499.40 \$3,855.60		\$0.00 W \$0.00 W
149 1.10.3		OF .	400 hrs		0 \$9,33				\$0.00	\$12,132.90	\$0.00		\$12,132.90		\$0.00
	1.10.3 Commissioning (2014)														Į V V
	Ken Moffeit (Phys) Takashi Maruyama (Phys)	OP OP	80 hrs 80 hrs		0 \$2,75 0 \$2,75				\$0.00 \$0.00	\$3,580.20 \$3,580.20	\$0.00 \$0.00		\$3,580.20 \$3,580.20		\$0.00 W \$0.00 W
	Takasni Maruyama (Phys) Tim Nelson (Phys)	OP OP	80 hrs		0 \$2,75				\$0.00	\$3,580.20	\$0.00		\$3,580.20		\$0.00 W
	Rental Car 1	OP	80 hrs		0 \$2,73				\$0.00	\$1,392.30	\$0.00		\$1,392.30		\$0.00 W
	Per Hansson (Phys)	OP	80 hrs		0 \$	0.00 \$0	00 \$0.0		\$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 \$6,57				\$0.00	\$8,552.70			\$8,552.70	\$0.00	\$0.00 W
	Rental Car 1	OP	80 hrs	0	0 \$1,07	1.00 \$1,071	00 \$1,392.3	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00	\$1,392.30	\$0.00	\$0.00 W
		<u> </u>	55 111 6		. 71,01	ψ1,011	\$.,00 2 .00	Ψ0.00	\$0.00	\$.,C52.00	\$0.00	\$5.55	÷ .,552.50	Ψ0.00	\$0.00 W

							WBS	V470 Fri 5/3/13									
ID	WBS	Task Name	Туре	Work	# Spares	Prototype	Cost	Labor	Ltotal	Material	Mtotal	Total	Spares	Prototypes	Total Operations	Total Infrastructures	Total Capital De
		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
		Per Hansson (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	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
151	1.10.5	1.10.5 Run 1.1 GeV (2014)		320 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
		Ken Moffeit (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
		Tim Nelson (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
		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
		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
152	1.10.6	1.10.6 Commissioning (2015)		560 hrs		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		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	\$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
		Tim Nelson (Phys)	OP	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
		Per Hansson (Phys)	OP	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
		Takashi Maruyama (Phys)	OP	80 hrs		0	ψ0.00	\$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	\$0.00	\$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	\$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
		Sho Uemura (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
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	\$128,373.12	\$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	\$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	s 0	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	0	\$53,050.00	\$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	s 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	0	0	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 0		T ,	\$0.00	\$0.00	\$159,475.00	\$159,475.00	\$159,475.00	\$0.00		\$159,475.00	\$0.00	\$0.00 W
		UCSC FY15	OP	1	0	0	φ.σσ,σ.σ	\$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 0			\$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	0	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