

J.A. Caggiano
Budget Justification

Table 1 Budget breakdown by specific item.

Item	Unit cost*	Number required	Subtotal (CDS)
ORTEC 3x3" NaI detectors with phototube	\$1,320	2	\$2,640
ORTEC 855 dual spectroscopy amplifiers	\$2,105	8	\$16,840
ORTEC 863 quad timing filter amplifiers	\$4,435	2	\$8,870
ORTEC 1142III preamplifiers	\$905	11	\$9,955
Quantar 3392A 75mm MCP/RAE plus resistive anode	\$19,435*	1	\$19,435
SRS PS350 HV power supply, HV bias divider, front ring, timing pick-off circuit, and HV cable set for MCP	\$5,460*	1	\$5,460
2 motorized actuators for foils and MCP, feedthroughs, and wire planes	\$7,500	1	\$7,500
ORTEC 9327 preamplifier/discriminator	\$2,790	1	\$2,790
CAEN V1190B VME 64-channel TDC, 100ps res., 52µs range	\$6,812*	1	\$6,812
CAEN V785 VME 32-channel peak sensing ADC's	\$7,237*	2	\$14,474
SIS3300 waveform digitizer, 105 MHz sampling rate**	\$7,041**	4	\$28,164
Cables and Lemo-to-header conversion panels	\$6,100	1	\$6,100
Catania detector	\$13,000*	1	\$13,000
		Subtotal	\$142,039
		Tax*	\$11,988
		Total	\$154,027

2 @ 1,125 ea
8 @ 1,125 ea
1 @ 3870
\$ 790 ea.

1 @ 2445 ea
5610 US
2x 5380 US

2.46K
9.84K
8.46K
9.5K

MCP'S

7.4K
14.1K

} use VFY8'S.
1 ~ \$5K.

78885
\$86221

*All items that were quoted in U.S. Dollars were converted to Canadian Dollars by multiplying by 1.30.
**Items quoted in Euro were converted to Canadian Dollars by multiplying by 1.56458 (rate on 22Oct04)
*Tax rate used was 9.3%, which is 7% PST plus one-third GST, due to partial GST rebate. Tax only applied to items purchased from outside TRIUMF.

req'd 56.8K
- 83.0K
rem 26.2K
fn MCP?