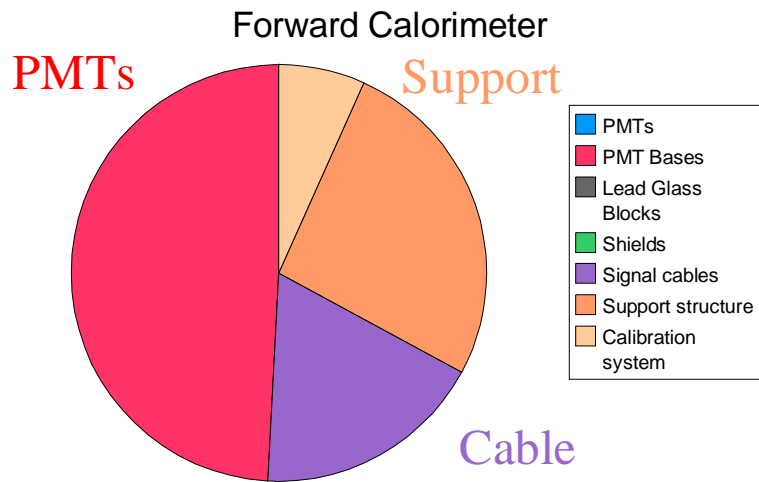


# Calorimeter Costs



Barrel Cal	2696.9 Channels	576		
<b>Materials</b>	<b>Item</b>	<b>Number</b>	<b>Unit Cost (\$)</b>	<b>Cost (\$K)</b>
	Scintillator Fiber			750
	Lead sheet			65
	Light Guides	576	150	86
	PMTs	576	1250	720
	PMT Bases	576	100	58
	Shields	576	100	58
	HV Cables	576	100	58
	Signal cables	576	100	58
	Glue and supplies			10
	Support structure			50
	Calibration system			100
<b>SubTotal</b>				<b>2012</b>
<b>Labor</b>	<b>Item</b>	<b>Number</b>	<b>Unit Cost (\$)</b>	<b>Cost (\$K)</b>
	Technician Yrs	10	30000	300
	Machinist Wks	50	1500	75
	Student Hrs	8000	9	72
	Shipping			20
	Subtotal (Fringe)			375
	Fringe (%)		16	60
	Subtotal (Overhead)			527
	Overhead (%)		30	158
<b>SubTotal</b>				<b>685</b>
<b>Total</b>				<b>2697</b>

Fwd Cal	670.0 Channels	2200		
<b>Materials</b>	<b>Item</b>	<b>Number</b>	<b>Unit Cost (\$)</b>	<b>Cost (\$K)</b>
	PMTs	2200	0	0
	PMT Bases	1500	100	150
	Lead Glass Blocks	2200	0	0
	Shields	2200	0	0
	Signal cables	2200	25	55
	Support structure			80
	Calibration system			20
<b>SubTotal</b>				<b>305</b>
<b>Labor</b>	<b>Item</b>	<b>Number</b>	<b>Unit Cost (\$)</b>	<b>Cost (\$K)</b>
	Technician Yrs	2	30000	60
	Machinist Wks	45	1500	68
	Student Hrs	10000	9	90
	Shipping			10
	Subtotal (Fringe)			128
	Fringe (%)		29	37
	Subtotal (Overhead)			264
	Overhead (%)		38	101
<b>SubTotal</b>				<b>365</b>
<b>Total</b>				<b>670</b>

