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# Operations at LIGO Hanford and LIGO Livingston Observatories

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# Status of Observatories

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- LIGO Hanford Observatory (LHO):
  - ›› Buildings in joint occupancy
  - ›› Beam tube completed, accepted & pumped down
  - ›› Beam-tube bake out preparations underway
  - ›› Vacuum equipment bolted down, some plumbed, some baked
  - ›› Lab integration underway
  - ›› SEI 1st-article test underway
- LIGO Livingston Observatory (LLO):
  - ›› Buildings in joint occupancy
  - ›› More than 1/2 of beam tube installed
  - ›› Vacuum equipment deliveries start next week

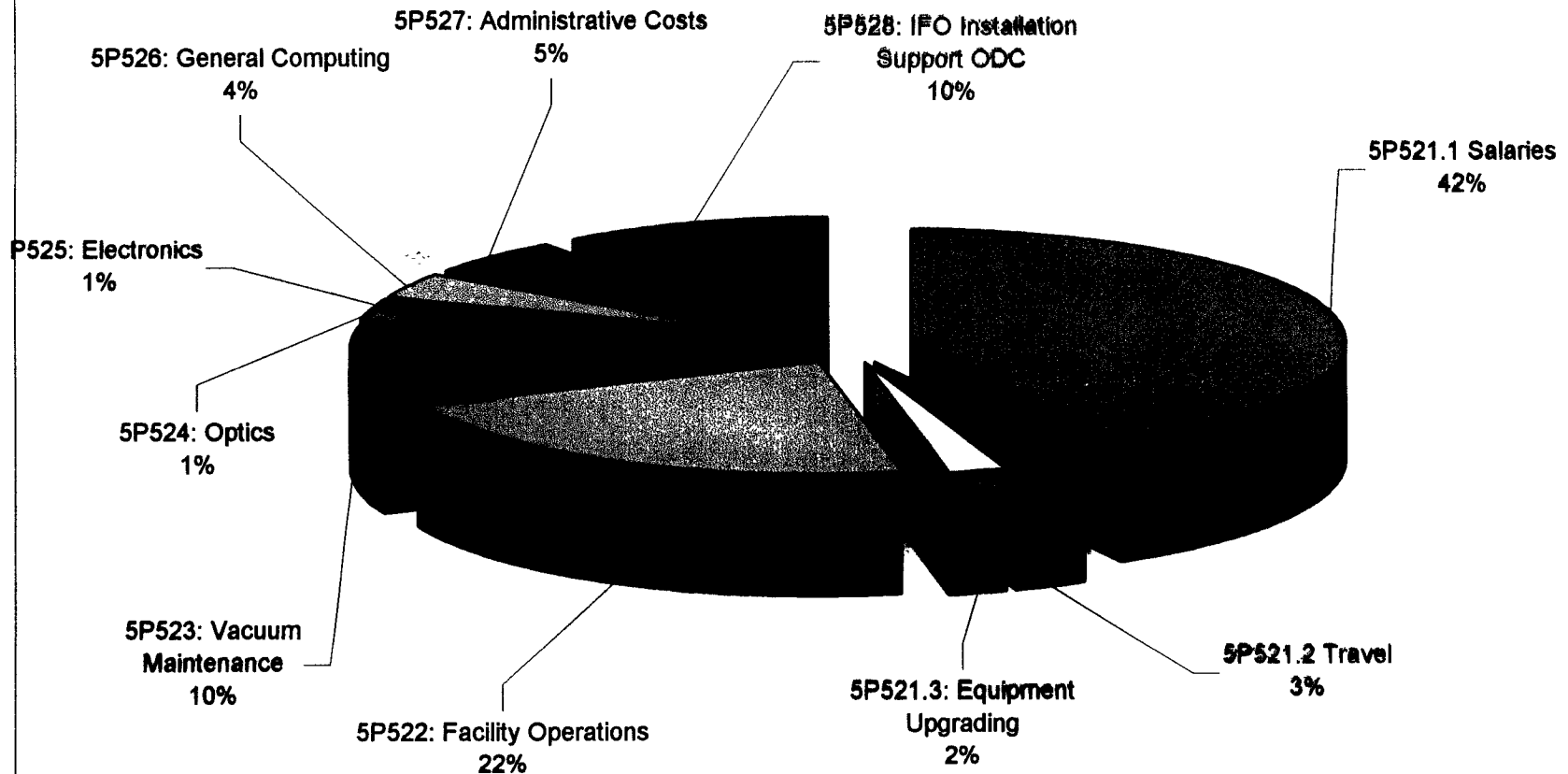
# Management Philosophy

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- Management structure is flat, not hierarchical
  - ››analogous to a small physics department
- Head has overall responsibility for operational mission
- Facility Manager provides facilities management, oversight of business administration and safety issues
- Science and engineering staff provide leadership and liaison on technical matters within laboratory and collaboration
- Technical support staff, together with science/engineering staff, both build and operate interferometers
  - ››no separate “technician” or “operator” classes
  - ››support staff can and will stand in for scientists on various operations tasks

# LIGO Hanford Observatory (LHO) Budget Chart

1998 Operations Budget by Category



# LIGO Hanford Observatory (LHO) Budget Table

<b>Operations Budget - WA Observatory (98K\$)</b>				
<b>Revised Basis of Estimate</b>				
<i>Category</i>	<i>Direct</i>	<i>Indirect</i>	<i>Total</i>	<i>%of Total</i>
5P521.1 Salaries	738.7	158.8	897.5	42.1%
5P521.2 Travel	45.0	9.7	54.7	2.6%
5P521.3: Equipment Upgrading	49.7	0.0	49.7	2.3%
5P522: Facility Operations	402.2	58.5	460.7	21.6%
5P523: Vacuum Maintenance	190.4	20.8	211.2	9.9%
5P524: Optics Maintenance & Supplies	24.0	5.2	29.2	1.4%
5P525: Electronics Maintenance & Supplies	24.0	5.2	29.2	1.4%
5P526: General Computing	63.3	13.6	77.0	3.6%
5P527: Administrative Costs	91.3	19.6	110.9	5.2%
5P528: IFO Installation Support ODC	200.0	14.3	214.3	10.0%
<b>Total Budget (in 98K\$)</b>	<b>1828.5</b>	<b>305.7</b>	<b>2134.2</b>	<b>100.0%</b>

# LIGO Livingston Observatory (LLO) Budget

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- FY98 Budget salaries:

Position	Name	Category	FTEs
Head	Coles	Mgr	0.50
Fac. Mgr.	Stapfer	Mgr	0.25
Admin	Wascom	Admin	0.25
Sr. Sci.	open	Sci	0.25
Sci.	open	Sci	0.25

- Salaries + Site Services + Materials&Supplies + Travel + Equipment = \$ 320 K for FY98