
ATLAS

February 19, 2004

Roles(I)

- SCT
 - Physics Division budgetary constraints => phase out of this activity after completion of module fabrication
 - To restore our role would require a continuing ~ 200K increment per year for postdocs and additional travel. And Research Program support (technical) to go along with a reasonable role. We are not asking for this.
- Software
 - Again Physics Division budgetary constraints and the inadequacy of the ATLAS Research Program funding forced us some months ago to reduce the level of activity by one FTE.
 - There is no Physics Division funding going into ATLAS software personnel.
 - We don't expect this to change and will rely on the Research Program to support what has been, and will be, a critical and coherent part of the ATLAS software development.
 - Continuation of the current effort in FY05 and later we believe is at risk given the reductions expected in the Research Program.

Roles(II)

- **Pixels**
 - LBNL is leading the pixel project. Failure to continue in this leading role will jeopardize ATLAS and more than a decade of investment.
 - The Physics Division is uniquely responsible for providing adequate support for physicists to complete the production of pixel components and the assembly, installation and commissioning at CERN.
- **R&D**
 - The Physics Division has supported R&D(TPC, SVXs, SNAP, pixels,...) in the past that has had a major impact on the field.
 - We must retain some R&D capability as we look ahead to upgrades to the LHC.
 - We expect most, but not all, of the support for this to come from the Research Program. So far this support has been delayed and the expected future level is well below what will be needed, based on our past experience.

Roles(III)

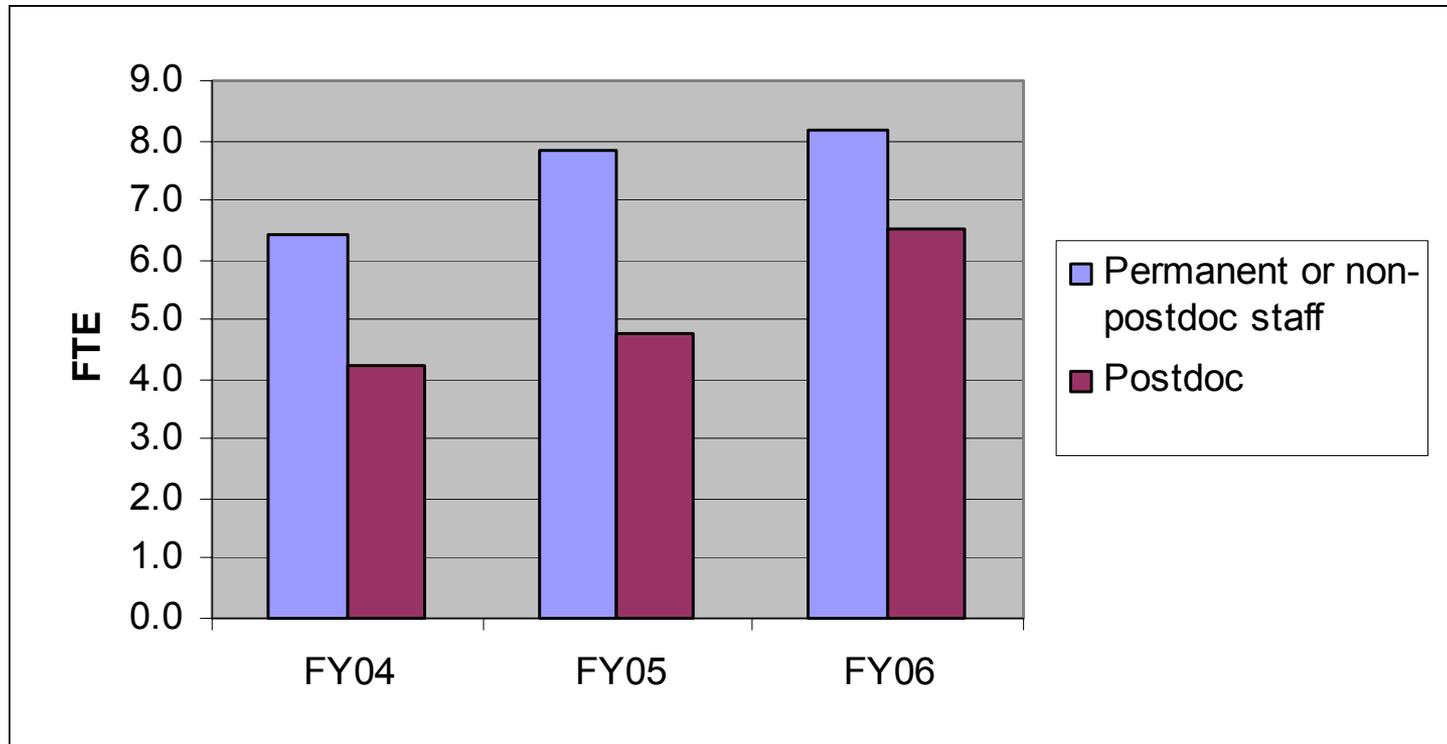
- Data analysis
 - We haven't worked so long to not also lead in the physics to be seen at the LHC.
 - Data analysis and physics will be the largest part of our ATLAS effort after turn-on of the LHC.
 - A steady increase in our effort in this area is planned to be ready at LHC turn on.

Role Summary

	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Detector Fabrication	Strips							
		Pixels	Assm.					
Detector Commissioning				Pixels				
				Inner Det.				
Software & Computing	Development							
					Upgrades			
Maintenance & Operations						Running		
						Detector Monitoring		
Physics	Simulation & Tools							
					Physics Analysis			
Detector Upgrades			Detector Upgrade R&D					
					Prototype Development			

ATLAS Physicists

- Last year we presented an ATLAS staffing plan for all ATLAS Division personnel through FY10.
- Budget circumstances have changed so rapidly that we only present here an updated portion for physicists through FY06.



FY04

- Postdocs
 - Term of two postdocs up at about end of FY04
 - Search for one replacement nearly completed, assumes 0.25FTE in FY04
 - Launch another search this summer for early FY05 arrival to maintain current level
- Non-postdocs
 - Added research time of J. Beringer, recently arrived for PDSG
 - Divisional Fellow search underway, assumes arrival in FY05.
- Total budget needed: \$3.4M
- Currently expected: <\$3.3M
 - Reduce travel below FY03 levels
 - Cut purchases more than factor 2 below FY03 level
 - Prompt termination of retirees(SCT crew) and postdocs
 - Can we hire postdoc? Finish Divisional Fellow search?

FY05

- Postdoc plan
 - Three new in FY05. Start, middle, near end of FY05
 - One existing postdoc moves to ongoing experiment for physics analysis
- Non-postdocs plan
 - Divisional Fellow arrives
 - Slow increase in senior people from CDF/D0(Shapiro and Madaras)
- Total budget needed: \$3.6

FY06

- Postdocs
 - One leaves near end of FY06, add 2.
 - Final assembly, installation and start commissioning of pixels
 - Ramp up software and physics analysis preparations
- Non-postdocs
 - Continue increase from CDF/D0, otherwise same
- We have enjoyed reduced overhead for physicists during the fabrication(project) phase of ATLAS. This will end FY06-FY07. Total increase for all personnel is ~ \$0.8M. We assume this takes effect at 50% level in FY06 and fully in FY07.
- Total budget needed: \$4.2M