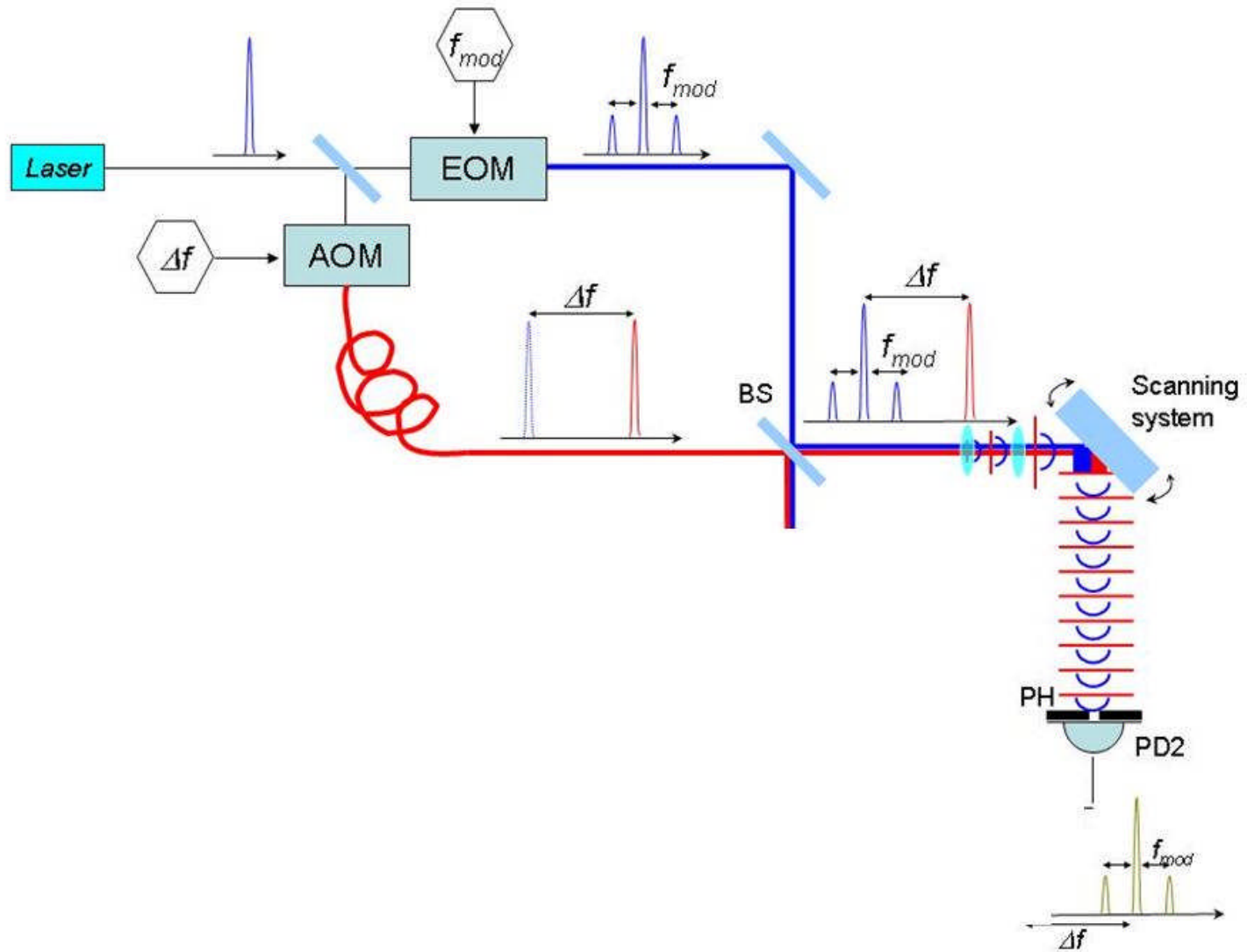


Phase camera Restart

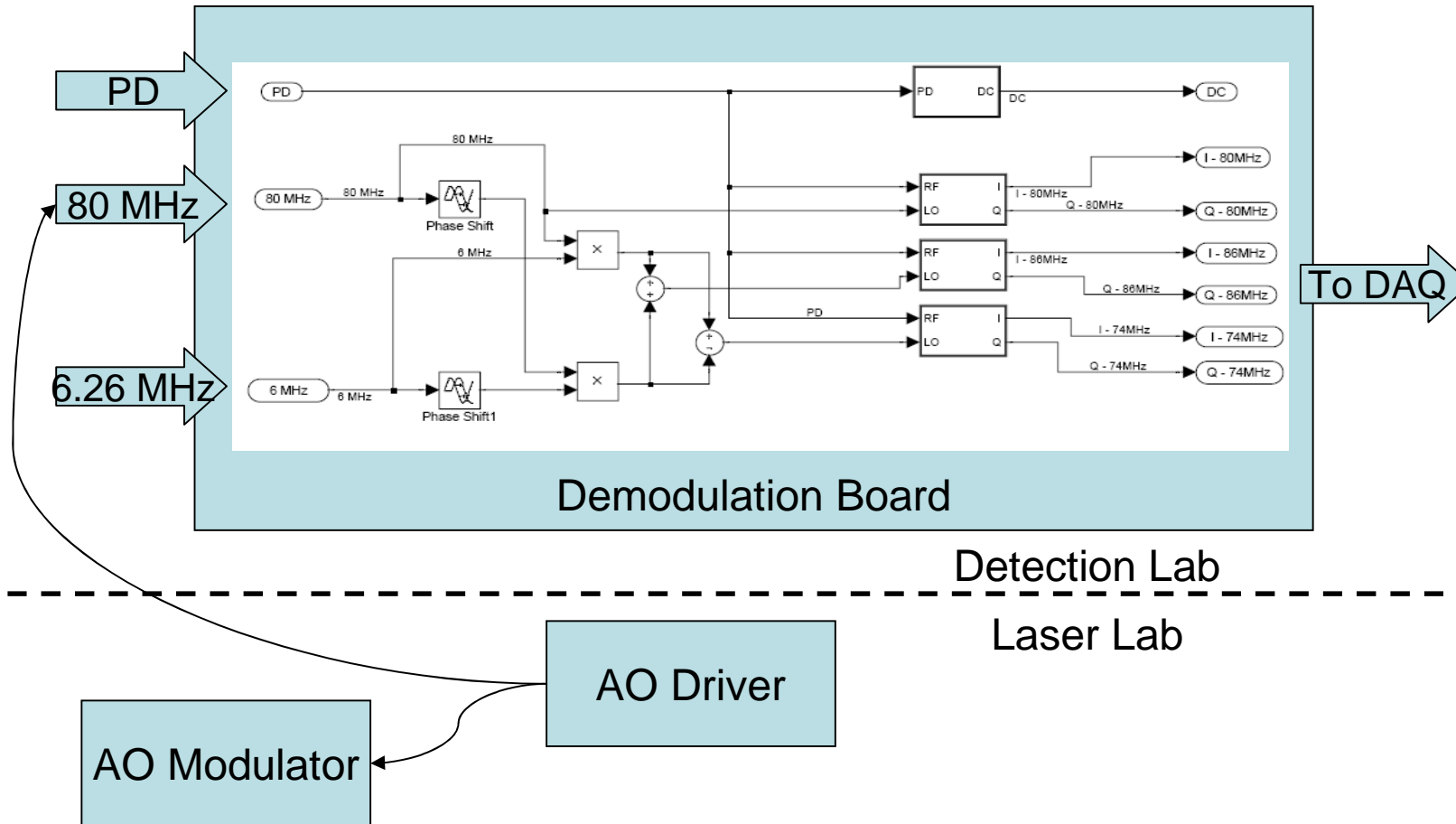
LIGO-G070349-00-Z

- Annecy group had a problem of technical manpower:
Pisa group is now in charge for the electronics
- ⇒ As a result few changes on the project and delay on the implementation plan
- LIGO kindly helped us by sending some components

Schematic



- LO signal generated from electronic signals



- No photodiode will be developed, commercial ones used instead

Several alternatives

- PZT is currently used for the “phase_camera_0”
- Fast steering mirrors (available at Naples)
- Galvos (just sent from LIGO)

Expenditures and foreseen budget

Date	Item	Cost (k€)	Funding institution
01-2007	AOM + driver	3.7	EGO
01-2007	Mirror and optical fiber mounts, pinholes	7	EGO
01-2007	Mirrors, beam splitters	2.5	EGO
03-2007	Collimator for the optical fiber (FC-APC connectorized)	2	EGO
05-2007	SM-PM optical fiber	1.5	EGO
	Total expenditures	16.7	

Date	Item	Cost (k€)	Funding institution
	Photodiodes	1-2	
	Electronics (LO Boards + demod)	2	
	Galvanometers and drivers (TBC)	5-10	
	Mirrors for spectrum analyzer	1	
	PC and acquisition board for testing purpose	2	
	Total foreseen expenditures	11-17	

Production plan

	2007											
Tasks and Deliverables	May	Jun	Jul	Aug	Sep	Oct						
Tasks												
1) test of the optical components (AOM, EOM, etc.) and set-up of some optical tools	█	█	█									
2) test of the commercial photodiodes available		█	█									
3) layout and realization of the electrical board and tests.	█	█	█	█								
4) test of the LO board with the optical signals.				█	█							
5) implementation of the PZT scanning system and/or of the galvo system (TBC)					█	█	█					
6) Test of the whole device								█	█	█		
Deliverables												
Installation in situ										█	█	