UT Optical Fiber Needs

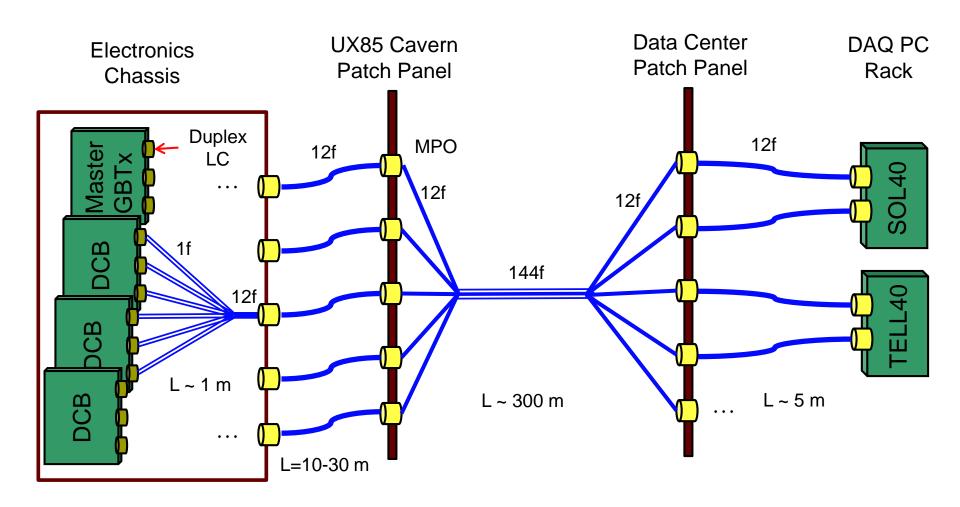
Jianchun Wang For the UT group

04/09/2015



UT Optical Connection Plan







UT Fiber Counts



Used for	Unit	Quant.	1f fiber	12f fiber
Event Data	UTa Chassis	× 4	138	12 / 16
	UTb Chassis	× 4	152	13 / 18
TFC/ECS	One Chassis	× 8	40	4
PS ECS	UT system	× 1	8	1
Mounted spares up to chassis				16
Total			1488	149 / 185

- UT has 8 electronic chassis near the detector. The upstream chassis (UTa) serve less detector modules than the downstream ones.
- The TELL40 (PCIe40) board can not process data from all 24 links. Regrouping of fibers at the data center may reduce the number of 12f & 144f fiber cables. The decision depends on the signal quality and the cost.
- The larger numbers in 12f fiber column are for no regrouping.
- UT power monitoring (PS ECS) needs bi-directional for communication. It may share fibers with other sub-detectors, or connect to electronics chassis.