2021-06-08 Detector Planning Meeting notes

Attendees

- McKelvey, Mark EPhilip Hart
- Kazutaka Nakahara
- Conny Hansson
- Bhavna NayakChris Koerber

Goals

• Set and status planning activities for detector development and deployment.

Discussion items

Time	Item	Who	Notes							
10 min	Beamtime support update		ePix10k timing test opportunity?							
30 min	Priorities Review	All	 2021 events: Projects new starts: ePixM selected, science leadership has chosen smaller ePixM plus XPCS version. Project plan in work. SparkPix-S Phase II (full-size ASIC for sparsification engine) ePixHR V: Prototype detector project underway, deliver sm camera in time for LDAC results. TXI Detectors (2Mp and 140kp based on ePixHR @5kHz) CDR Closed out, project underway. ePixUHR (130nm TSV structure to reach 100kHz), planning, need to consider SparkPix-ED results. Production: spare modules (0.5 & 1mm) Module order in work, new sensor order out Approved 3d copy of ePix10k2m: underway, November delivery Approved spare quads for MEC: underway, August delivery Proposed in-air 2m/1mm, planning in work. Proposed UED detector upgrade, planning in work. Proposed ePix10k4m (concept) RIXS-CCD/cooler test and verification: Delivery delayed until mid-Julyreadiness?? Parts ordered. HiZ collaboration tests: SSRL LoI needed, Ge chamber tests Outreach for R&D support (SparkPix-ED, SparkPix Delta). Support effort for LCLS-II-HE instruments (performance verification/implementation planning) SBIR effort for UXI. 							
			 Group priorities review: Testing Run 'standard' cal on two 10k smalls with new firmware, log tracker. CompEnOn study during CXI checkout time? 111, 1a vs 19? Any ePix100 detectors in ASC? Can we figure out what's wrong with ePix100/7? RIXS-CCD cooler test planning. Analysis Gather and process relevant commissioning data for Mp travellers on Confluence. Solid pedestals Noise map Response uniformity (mini-X cu-fluorescence) Bootstrap gain (sealed source) Linearity (signal injection) Documentation Complete on-line travellers for Mp detectors Development Storage nodes configured, put in use? LCLS I/I compatibility? Chase racks anchoredcables, water status? Actions: 							

30 min	Status	Self-assessment period should be opensequence accelerated this yeargo ahead
		Cal team meet ton Friday??
		LDAC Panel assembled
		Coming up on self-assessment periodaiming for early salary adjustment period
		KN:
		 Rayonix needs repair at Rayonix, do in August XPP needs 4 ePix100 by July 1 plus 0.5m JF
		LCLS-II DAQ not fully operational in ASCneeds resolution
		 @MFX for wave8 this week.FIM beamtime this weekend Spare JF Power supply received, need cold plate.
		• UED MPOD?
		PH:
		 Started processing CI on CompEn expnothing jumps out. MEC experiment on Thursday, detectors should be OK
		CH:
		 Small 10k still has fw problem
		 Measuring leakage via ACQ timing window Will use portable vac chamber for Hi-Z
		RA:
		Prepare for mid-july RIXS-CCD
		 Lost Derek, may need May Ling to help training on laser vibrometer Need mtg for acceptance test planning (Friday)
		BN:
		Min/max stitching.
		 Run cal on new ePix firmware. Grafana setup to alert Slack channel.
		 Made updates to detector website, in work. Working with PH on porting PyRoot to Python.
		CK:
		Lesker chamber quote in work.
		Order/borrow Variac.

				M&S Status (Through March)										
									Values					
			DAD				_		KCST				aining	
				roj_Act	-	/_	*	LSTM Desc J M&S		\$0	JALS \$0	Bai	ance	
			10918-A4001 16152-A4001			DET Dist Exp Support ePix Support		M&S		50 63	\$0 \$18		(\$0) \$45	
				8-A4001		Other Detector Support		M&S		13	\$0		\$12	
				53-A4001 03-A4001 37-A4001 26-A4001 59-A4001 41-A4001		C-S PAD Support		M&S		\$6	ψŪ		\$6	
						Jungfrau Support DET Department Management DET Department Research DET Dept Infrastruct & Dev Detector Program Management DET Department OIP Projects		M&S		11		\$11 \$6		
								M&S		11	\$6			
								M&S		57	\$25		\$32	
								M&S	\$1		\$81		\$56	
								M&S	-	\$0	\$0	\$0		
								M&S		40	\$40			
									\$339k	\$170	k	\$169k	(
			•	Labor sna	psho	t (December actuals):				/alues				
										CST			D	
				DA Drai	A	PA Activity_Desc		- LSTM D			ACTU	A16	Remaining Balance	
				PA Proj_ 10918-A	_			Shop Se		\$134	ACTU	ALS	\$134	
			-	10918-A				SLAC La		\$19	-	\$3	\$154	
				16152-A				Shop Se		\$77		ζ,j	\$77	
			-	16152-A				SLAC La		<i>Ş11</i>		\$3	(\$3	
			-	16158-A		Other Detector Support						512	(\$12	
			-	16158-A					hop Services LAC Labor			32	\$83	
			-	18303-A		Jungfrau Support		Shop Se		\$115 \$6		552	\$6	
			-	16287-A					Services	\$25			\$25	
			-	16287-A						\$136		580	\$56	
				16826-A						\$150		ΨŪ	\$9	
						•		SLAC La		\$197		555	\$142	
			-	16826-A400 16159-A400		•				\$63		555	\$142	
			-	16159-A		•		Shop Se SLAC La		\$264		592	\$172	
			-	19775-A		•		SLAC La Shop Se		<i>γ</i> 204		,52	Ş1/2	
			-	17341-A		_	nt			\$330		54	\$276	
			-	17541-A				Shop Se		اردې		\$8	\$276	
			-	19733-A			nt	SLAC La				\$0 \$5	(\$9	
			-			, ,		Shop Se		\$48		<u>ر</u> ې	\$48	
			· ·	17439-A400 17439-A400		· · ·			AC Labor			522	\$35	
			-	17-35-A	100.	Der Department OF Projects		JLAC Ld		\$57				
			-							1479)	423	\$1,056	
			-					1						
15 min	Review ASC First	all	Coord	linate/upda	ate la	ab schedule.								
	Projects													
10 min	Any other business													

Action items: