

2021-07-27 Detector Planning Meeting notes

Attendees

- [McKelvey, Mark E](#)
- [Philip Hart](#)
- [Kazutaka Nakahara](#)
- Conny Hansson
- Bhavna Nayak
- Chris Koerber

Goals

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

Discussion items

Time	Item	Who	Notes
10 min	Beamtime support update		<ul style="list-style-type: none">▪ ePix10k timing test opportunity?

30 min	Priorities Review	All	<ul style="list-style-type: none"> • 2021 events: <ul style="list-style-type: none"> ◦ Projects new starts: <ul style="list-style-type: none"> ▪ ePixM project plan submitted, now uploading to P6.. ▪ SparkPix-S Phase II (full-size ASIC for sparsification engine), on-track ▪ ePixHR V: Prototype detector project underway, deliver sm camera in time for LDAC results. ▪ TXI Detectors (2Mp and 140kp based on ePixHR @5kHz) delta mech design review on Friday. ▪ ePixUHR (130nm TSV structure to reach 100kHz), CDR tmrw for 100kHz prototype based on simplified SparkPix-ED. ◦ Production: <ul style="list-style-type: none"> ▪ spare modules (0.5 & 1mm) Module order in work, new sensor order out. No-ghost modules delayed to October. ▪ Approved 3d copy of ePix10k2m: underway, November delivery (may slip due to module delay) ▪ Approved spare quads for MEC: underway, August delivery ▪ Proposed in-air 2m/1mm project plan submitted to OIP. ▪ Proposed UED detector upgrade, planning in work. ▪ Proposed ePix10k4m (concept) ◦ RIXS-CCD/cooler test and verification: Delivery delayed until mid-July...readiness?? Issue with 2nd cooler. ◦ HiZ collaboration tests: Ge and CZT modules wirebonded, CZT no stick, SSRL & LCLS beam times secured, Ge chamber in work. ◦ 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: <ul style="list-style-type: none"> ◦ Testing <ul style="list-style-type: none"> ▪ 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 <ul style="list-style-type: none"> ▪ Gather and process relevant commissioning data for Mp travellers on Confluence. <ul style="list-style-type: none"> ◦ Solid pedestals ◦ Noise map ◦ Response uniformity (mini-X cu-fluorescence) ◦ Bootstrap gain (sealed source) ◦ Linearity (signal injection) ◦ Documentation <ul style="list-style-type: none"> ▪ Complete on-line travellers for Mp detectors ◦ Development ◦ Lab 'commissioning' <ul style="list-style-type: none"> ▪ DAQ <ul style="list-style-type: none"> • Storage nodes configured, put in use? • LCLS I/II compatibility? ▪ Chase racks anchored....cables, water status? ▪ Vac chamber for in-lab tests? Compatible with XPP alcove? <p>Actions:</p>
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30 min	Status		<p>Self-assessment period should be open...sequence accelerated this year...go ahead</p> <p>Cal team meet ton Friday??</p> <p>LDAC Panel assembled</p> <p>Coming up on self-assessment period...aiming for early salary adjustment period</p> <p>KN:</p> <ul style="list-style-type: none"> • 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 ASC.....needs resolution • @MFX for wave8 this week.FIM beamtime this weekend • Spare JF Power supply received, need cold plate. • UED MPOD? <p>PH:</p> <ul style="list-style-type: none"> • Started processing CI on CompEn exp....nothing jumps out. • MEC experiment on Thursday, detectors should be OK <p>CH:</p> <ul style="list-style-type: none"> ▪ Small 10k still has fw problem ▪ Measuring leakage via ACQ timing window ▪ Will use portable vac chamber for Hi-Z <p>RA:</p> <ul style="list-style-type: none"> ▪ 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) <p>BN:</p> <ul style="list-style-type: none"> • 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. <p>CK:</p> <ul style="list-style-type: none"> • Lesker chamber quote in work. • Order/borrow Variac.
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5 min	Budget Update	mmck	<ul style="list-style-type: none">M&S Status (Through May)																																																																																																																																
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