



# DM-Science F21B/S22A retrospective and plans

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**ENERGY**

**SLAC**

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- Photo-Z
  - 19 Photo- LoRs received in total from the Community. 12 advocated for particular algorithms (ML, TF ML+TF hybrid, post-processing to enhance PZ estimates, 6 presented scientific use cases, and 1 was a notification of future software development.
  - DMTN-049, updated to include the community input and a look forward to Rubin Commissioning and the Photo-z Validation Cooperative.
- A large number of open questions around Special Programs have been resolved ([DM-20374](#)). Most are decisions that need to be transferred to Ops or things that will be exercised in commissioning.

# Verification, Validation, Characterization

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- Middleware Gen-3 test campaign updated to identify > 80 MW requirements that can be verified - execution ongoing now.
- Continued development of faro - continues to be a very good collaboration with commissioning
- SPIE paper on faro submitted
- Ops RPF-VVT doing a lot of good work on DP0.2 V&V

# DPDD, Requirements, Documentation

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- Completed document on requirements on user computing/batch - [DMTN-202](#)
- Many outstanding tickets on DPDD but unfortunately not much progress in F21B

# Community Interactions

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- Photo-Z - the virtual forums continued to help the community prepare to submit LoRs
- Eric gave SciCollab talk on time series features to compute
- SC liaisons continue.
- Pre-ops CET continue to pick up a lot of the community focused work.

# Science Studies

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- Photo-z work will focus on preparing for commissioning and the Photo-z Validation Cooperative.
- Pick up the work on Data Products related to Detection efficiencies for Difference Images ([DM-1930](#)) and coordinate with the commissioning/in-kind efforts. There are two LOIs related to fake injection one on DiffIm and one on DRP
- Address remaining topics on Special Programs concerning 1) the RSP's capabilities for identifying, browsing, and other handling of data products from Special Programs processing and 2) to ensure LSR-REQ-0111 and minExpTime are flowed down to LSE-61. obtaining and processing exposures not taken in a standard visit mode including those with a minimum exposure time of minExpTime. Expecting to close out by the end of June 2022.

# Verification, Validation, Characterization

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- Complete the middleware Gen-3 acceptance test campaign, expecting to verify over 80 MW requirements.
- Plan for the science readiness for commissioning acceptance test campaign focus on verification of all P1a (LDM-503-14).
- Continue development of faro and implement of KPMs. Run on precursor datasets to characterize performance. Excellent collaboration with commissioning on this!
- AuxTel data processing and analysis.
- ComCam expected on sky early 2023 focus on readiness for processing and analysing large volumes data.

# DPDD Requirements Documentation

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- Effort to address all outstanding DPDD tickets and to clarify the use of the construction DPDD with the DP/DR specific DPDDs. [DM-22078](#): Reconciling the DPDD with the required information for pipeline QA.



# Community Interactions

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- Photo-z virtual forums will restart in a month or 2. Focus will be to plan for the validation cooperative integrated with the commissioning in-kind program.
- SC liaisons program continues.
- Pre-ops CET continues to pick up a lot of the community focused work.