Performance of the LSST Calibration Systems

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ABSTRACT

This is the abstract...

1. INTRODUCTION

- Much of LSST science will be limited by systematic errors in the photometry.
- The importance of characterizing and eliminating/compensating for these systematics was recognized early on
- Paper discusses the suite of instruments developed, designed and fabricated to perform these analyses
- Presents performance and future uses

2. CALIBRATION SCREEN SYSTEM

2.1. Illumination Sources

Laser and LEDs

2.2. Screen Design and Fab

2.3. Illumination System

2.4. Alignment

3. COLLIMATED BEAM PROJECTOR

3.1. Design and Fab

3.2. Mask Design and Use Cases

3.3. Image Quality and Opto-mechanical Performance

3.4. Relative Throughput Calibration

3.5. Ghost Tracking

4. MASTER FLAT CONSTRUCTION

APPENDIX

Initial paper list added here for reference.

"Editor" is a responsible team leader but not necessarily the person who will do most of the required work, or who will eventually become the first author. Both issues will be handled by individual teams.

domain: Telescope & Site editor: Jeff Barr title: Overview of the LSST Telescope domain: Telescope & Site editor: Sandrine Thomas title: Performance of the LSST Telescope domain: Telescope & Site editor: Lynne Jones title: The LSST Scheduler Overview and Performance domain: Telescope & Site editor: Bo Xin title: Performance of the LSST Active Optics System domain: Telescope & Site editor: Tiago Ribeiro title: LSST Observing System Software Architecture domain: Camera editor: Justin Wolfe title: LSST Camera Optics domain: Camera editor: Chris Stubbs title: LSST Camera Rafts domain: Camera editor: Steve Ritz title: LSST Camera Cryostat domain: Camera editor: Ralph Schindler title: LSST Camera Refrigeration domain: Camera

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title: LSST Data Management System Verification and Validation domain: Data Management editor: Mario Juric title: LSST Moving Object Processing domain: Data Management editor: Robert Lupton title: LSST Calibration Strategy and Pipelines domain: Calibration editor: Patrick Ingraham title: Performance of the LSST Calibration Systems domain: Calibration editor: Patrick Ingraham title: Atmospheric Properties with the LSST Auxiliary Telescope domain: EPO editor: Amanda Bauer title: Overview of LSST Education and Public Outreach domain: EPO editor: Ardis Herrold title: LSST Formal Education Program domain: EPO editor: Amanda Bauer title: LSST EPO: The User Feedback domain: Commissioning editor: Chuck Claver title: LSST Observatory System Operations Readiness Report domain: Commissioning editor: Bo Xin title: Performance of Delivered LSST System domain: Commissioning editor: Chuck Claver title: Active Optics Performance with LSST Commissiong Camera

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A. REFERENCES

REFERENCES

Acronym	Description
DAQ	Data Acquisition System
DM	Data Management
EPO	Education and Public Outreach
LSST	Large Synoptic Survey Telescope

B. ACRONYMS