



Contribution ID: 31 Type: **Poster presentation (90 second oral summary, 90 minute poster session & free presentation times over 3x 40m coffee breaks)**

CCDs in Living Color: Understanding the LSST Camera focal plane's visual color via quantum efficiency measurements.

Tuesday, 12 March 2024 14:30 (1h 30m)

The LSST Camera focal plane, the largest ever constructed, consists of 201 16-MegaPixel CCDs from two manufacturers. Viewed in room light the CCDs are blue colored, with one vendor's sensors a consistent dark blue while the other ranges from light blue to very light greenish-blue. We interpret the visual appearance as due to the amount of light reflected, or $1 - QE$, as a function of wavelength and compare these colors against those expected from our laboratory measurements of Quantum Efficiency. Visually the comparison between digital photographs of the focal plane and the QE-based model is excellent. Finally, we use our photograph of the focal plane in room light to compare with measurements of the CCD to CCD absolute level of QE in visual wavelengths and comment on the utility of this room-light photographic method.

contribution subject matter

CCD sensors

Keywords for your contribution subject matter (this will assist SOC in accurately characterizing your contribution)

LSST Camera
Quantum Efficiency

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Session Classification: Poster Session

Track Classification: Major ISPA Workshop Tracks: Sensor and Systematics Characterization