Contribution ID: **39** Type: **Poster presentation (90 second oral summary, 90 minute poster session & free presentation times over 3x 40m coffee breaks)**

Direct Signal Injection Crosstalk in LSST Camera Readout Electronics

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

The Rubin Observatory LSST Camera exhibits novel crosstalk between charge-coupled device (CCD) amplifier segments that does not scale linearly with intensity. An open question regarding the characterization of this crosstalk is the fraction sourced in the camera readout electronics as compared with cabling and on-chip effects. Using a custom-made electronics board that simulates the load of a CCD, we can bypass the CCD and inject proxy video signals directly into a Rubin LSST Camera readout electronics board (REB5). In this way, we are able to isolate the sources and shape of crosstalk and its nonlinearity. We will discuss what our tests reveal about the source and mechanism of nonlinear crosstalk the LSST Camera.

contribution subject matter

CCD sensors

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

LSST, Rubin Observatory, CCD, Crosstalk

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