



Contribution ID: 28 Type: **Poster presentation (90 second oral summary, 90 minute poster session & free presentation times over 3x 40m coffee breaks)**

A skipper-CCD light shield for X-ray detection in space

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

In this work, we will present advancements in the design of Skipper-CCD sensors tailored for X-ray detection in environments with high optical background levels, such as those expected in space. These packages incorporate a custom-made aluminum shield placed on the CCD surface that successfully blocks over 99% of visible light while preserving the efficiency for keV X-rays. These features allow us to perform precise and reliable X-ray measurements in environments challenged by visible light interference. Furthermore, we briefly discuss the potential implementation of this design concept in frame-transfer CCDs, opening opportunities for broader applications and advancements in imaging technologies.

contribution subject matter

CCD sensors

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

X-ray detector, space, transfer frame, skipper-CCD

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