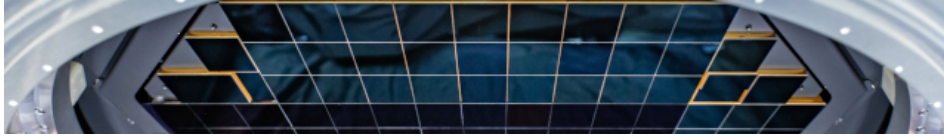


Image Sensors for Precision Astronomy (ISPA 2024)



Contribution ID: 4

Type: **Oral presentation (20 minute)**

Teledyne's High Performance Visible and Infrared Focal Plane Arrays for Precision Astronomy

Tuesday, 12 March 2024 16:00 (25 minutes)

Teledyne produces high performance visible focal plane arrays (FPAs) at e2v Space Imaging (United Kingdom) and DALSA (Canada). Infrared FPAs are produced at Teledyne Imaging Sensors in Camarillo, California.

This presentation will review the different types of visible and infrared FPAs and discuss the backside illuminated CMOS and CCD visible FPAs and hybrid CMOS IR FPAs offered by Teledyne. A comparison will be made between the artifacts of the different types of FPAs with focus on the attributes of a CTIA (capacitive transimpedance amplifier) pixel that overcomes some of the negative issues that arise in the source follower pixel.

contribution subject matter

CMOS sensors

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

Focal Plane Arrays (FPAs), CMOS, Hybrid CMOS, HgCdTe detector, Source Follower, CTIA

Primary author: BELETIC, James (Teledyne Digital Imaging)

Presenter: BELETIC, James (Teledyne Digital Imaging)

Session Classification: Session 3 - sensor development programs

Track Classification: Major ISPA Workshop Tracks: Other Precision Astronomy Tools or Sensors