

Astronomy / Physics Success Stories with Nüvü Caméras' EMCCD Technology

Integrated in an astronomical 1.6m telescope for ground-based satellite tracking system for On-Orbit service which may lead to space debris reduction. Project directed by Dr. Scott of the Defense Research and Development Canada.

http://dx.doi.org/10.1016/j.actaastro.2015.03.010

Characterized for space-based high contrast imaging spectroscopy of extrasolar planets and conclude that Nüvü is conservative when reporting its product specifications. Project directed by Dr. Wilkins from University of Maryland with the NASA Goddard Space Flight Center. https://arxiv.org/abs/1407.0701

Studied as the baseline for the NASA WFIRST-AFTA mission for the chronograph instrument to detect planets under extremely low flux conditions. Instrument project directed by Dr. Zhao of the Jet Propulsion Laboratory.

https://arxiv.org/abs/1601.01761

Characterized for ground-based adaptive optics system telescope and demonstrated the multiple region of interest feature (mROI) performances. Instrument project directed by Dr. Rigaut of the Australian National University.

http://spie.org/Publications/Proceedings/Paper/10.1117/12.2230481

Integrated into a pyramidal wavefront sensor of an adaptive optics system for higher sensitivity and larger dynamic range. Project directed by Dr. Thibeault of Université Laval with the Institute of National Optics. <a href="http://spie.org/Publications/Proceedings/Paper/10.1117/12.2056893">http://spie.org/Publications/Proceedings/Paper/10.1117/12.2056893</a>

Considered for future space instruments requiring high-speed accurate photometry derived from a reduced sky background and the absence of scintillation. Project directed by Dr. Djazovski of the Canadian Space Agency.

http://spie.org/Publications/Proceedings/Paper/10.1117/12.2036206

Integrated in a faint intergalactic-medium redshifted emission balloon project designed to observe low density emission around galaxies. Project directed by Dr. Morrissey of the California Institute of Technology. <a href="http://authors.library.caltech.edu/63327/1/96010O.pdf">http://authors.library.caltech.edu/63327/1/96010O.pdf</a>

Studied as the baseline of a stratospheric balloon project to acquire extrasolar planet image. Project directed by Dr. Marois of the National Research Council of Canada. http://authors.library.caltech.edu/57717/1/396365.pdf