

VST in the era of the large sky surveys



Contribution ID: 7

Type: **not specified**

VST ATLAS - past, present and future highlights

Tuesday 5 June 2018 16:35 (25 minutes)

“VST ATLAS is a ugriz imaging survey of similar depth to SDSS and has now completed observations of 4700deg^2 of the Southern sky, making it the “Southern Sloan” - but with sub-arcsecond median seeing in all bands. With its well-matched sister VISTA Hemisphere Survey in J and K, it also covers the widest wavelength range from the ultraviolet to the infrared and into the mid-IR via WISE. ATLAS highlights so far range from quasar redshift surveys in the range $0.5 < z < 6.5$ including quadruply lensed quasars and investigations of the enigmatic CMB Cold Spot via ATLAS based galaxy redshift surveys through to the discovery of dwarf Milky Way satellite galaxies including the crucial Crater 2 dwarf and new catalogues of thousands of white dwarf stars in the Milky Way. Further results on the ISW effect and new galaxy cluster and quasar catalogues are amongst many in the pipeline. In future, these ATLAS surveys will be vital for the exploitation of X-ray surveys of quasars and rich galaxy clusters detected by the eROSITA satellite due for launch in 2019. Ultimately they will also be vital for the follow-up of X-ray AGN + quasar + galaxy cluster redshift surveys by the ESO VISTA 4MOST fibre spectrograph due to be commissioned in 2022. “

Presenter: SHANKS, T.