

Optical surveys and particle astrophysics: prospects in the LSST era

Wednesday, 10 May 2017 11:30 (30 minutes)

Steady advances in telescope and camera technology have allowed us to explore the night sky deeper, wider, and faster with each new generation of instruments. The next major experiment in this endeavor is the Large Synoptic Survey Telescope (LSST), now under construction in Chile, with first light scheduled in 2020. LSST will catalog more stars and galaxies than all previous astronomical surveys combined, and will monitor transient, variable, and moving objects over a ten-year period, generating ~10 million alerts each night. I will focus on the ways that LSST and other optical surveys complement gamma-ray, neutrino, and gravitational wave experiments in the study of dark matter, dark energy, neutrino physics, and the dynamic universe.

Primary author: BECHTOL, Keith (LSST)

Presenter: BECHTOL, Keith (LSST)

Session Classification: Plenaries

Track Classification: Optical surveys and particle astrophysics: prospects in the LSST era- Keith Bechtol, LSST