The Large Synoptic Survey Telescope

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The Large Synoptic Survey Telescope (LSST) is a large aperture, wide-field, ground-based optical telescope designed to provide a deep time-domain survey of the entire southern hemisphere in six color bands covering the wavelength range 320 – 1050 nm. Every piece of the southern sky will be visited by LSST 1000 times over the ten-year duration of the mission. The resulting database will enable a diverse array of in-depth investigations ranging from studies of moving small bodies in the solar system to the structure and evolution of the universe as a whole. I will review the basic design of the LSST, and provide a brief tour of some of the exciting science that we expect to come from this major new Facility.