



The Large Synoptic Survey Telescope (LSST) will conduct a 10-year wide, fast, and deep survey of the night sky starting in 2022. LSST Education and Public Outreach (EPO) will enable public access to a subset of LSST data so anyone can explore the universe and be part of the discovery process. LSST EPO aims to facilitate a pathway from entry-level exploration of astronomical imagery to more sophisticated interaction with LSST data using tools similar to those used by professional astronomers.

To deliver data to the public, LSST EPO is creating an online Portal to serve as the main hub of EPO activities; the Portal will be accessible by a traditional desktop interface and also optimized for use on mobile devices.

A central feature of the Portal will be the EPO Skyviewer, an interactive online tool that will introduce the **general public** to a huge color image of the full available night sky observed by LSST. The Skyviewer will guide users to explore exciting astronomical objects and offer in-depth information on individual objects in the EPO database. It is designed to be used by anyone, and requires no previous knowledge or training.

Formal educators will be able to use the Portal to access real LSST data with Jupyter notebooks (an interactive online coding environment). These online notebooks will make LSST data easily available for advanced middle school through college level students to access and analyze. Use of the notebooks will circumvent common obstacles caused by firewalls, bandwidth issues, and the need to download software, as they will be accessible from any computer or tablet with internet access. The notebook activities will be aligned with Next Generation Science Standards, and will adhere to the guidelines in Chile's EXPLORA program. Although the LSST EPO Jupyter notebooks are Python-based, a knowledge of programming will not be required to use them.

EPO will enable researchers to initiate **citizen science** projects using any LSST data with maximum flexibility through a collaboration with Zooniverse, a leading online citizen science platform. Citizen science offers opportunities for public volunteers to contribute to real science research and make important discoveries, and will enable more science with LSST.

The EPO Portal will guide **content creators at informal science centers** to a multimedia gallery containing photos, video, interactive 3D models, and more. These digital assets will be made available in a variety of formats, encouraging wide adoption by facilities large and small.

LSST EPO will engage with the Chilean community through Spanish-language components of the Portal and will partner with organizations serving underrepresented groups in STEM. LSST EPO is committed to building sustainable partnerships in order to maximize effectiveness and meaningful engagement with underserved audiences.

