Home Announcements Meetings Star Parties Calendar Newsletter Membership Contact About

Presentation on Friday November 3, 2023, 8:00pm PST in the CSM Planetarium

Hannah Pollek

Mechanical Engineer, LSST at SLAC National Accelerator Laboratory

The Vera Rubin Observatory and LSST Camera

Free and open to the public.

Researchers at SLAC National Accelerator Laboratory with the Legacy Survey of Space and Time (LSST) Camera, the world's largest digital camera ever built for astronomy (Hannah Pollek second from right). The LSST Camera is roughly the size of a small car and weighs three tons. It features a five-foot wide front lens and a 3,200-megapixel sensor that will be cooled to -100 degrees Celsius to reduce noise. The camera, scheduled to



start capturing images in early-mid 2025, will live atop the Vera C. Rubin Observatory's Simonyi Survey Telescope in Chile where it is tasked with observing the night sky for a decade with the goal of providing a trove of data that scientists will study to try and understand some of the universe's biggest mysteries, including the nature of dark energy and dark matter.

In this presentation Hannah Pollek will give an overview of the Vera Rubin Observatory as a whole, with emphasis on the construction of the LSST Camera at SLAC National Accelerator Laboratory. She will also talk about the science goals of the project during its 10 year survey, the nationwide and international collaborations in building it, and the challenges of handling the immense amounts of data that will be taken each night.



Hannah Pollek has been a Mechanical Engineer on the LSST project team at SLAC for 5 years, responsible for assembling, mounting, and testing the camera on the LSST. As part of her work, she will travel to Chile to help with the installation of the camera. She first came to SLAC on the LSST project as an intern in 2018, Prior to that, she was a team member and project lead at Aztec Baja SAE where she assisted in the design and manufacturing of the 2017-2018 race car. She received her BS degree in Mechanical Engineering from San Diego State University in 2019. When she is not helping create the world's largest digital astronomical camera, she enjoys hanging out with her dog, playing volleyball, and crocheting.