[Back to Search Results](#)

SLAC National Accelerator Laboratory is one of 17 Department of Energy (DOE) National Laboratories, and operated by Stanford University on behalf of the DOE. SLAC develops and operates some of the world's premier science facilities, including the first hard X-ray free-electron laser. Research at SLAC explores the structure and function of matter and the properties of energy, space and time, at the smallest and largest scales, all with the goal of solving problems facing society and advancing human knowledge.

LSST (Large Synoptic Survey Telescope) Integration and Test Engineering Manager

Location: **Menlo Park, CA (HQ)**

Job Requisition #: **2411**

# of openings: **1**

Description

Job Overview

The SLAC National Accelerator Laboratory is seeking an experienced Engineer to be the Engineering Manager for Integration and Verification Testing (I&T) of the Large Synoptic Survey Telescope Camera (LSST-Camera).

The Large Synoptic Survey Telescope (LSST) is a wide-field 8.4-meter ground-based telescope, with a single instrument, the LSST Camera, capable of imaging the entire available sky every three nights. Over ten years LSST will image 20,000 square degrees of the southern sky, visiting each patch 1000 times. The LSST Camera, led by the SLAC National Accelerator Laboratory and currently under construction, will be the largest astronomical camera in existence, featuring an three-element optical corrector whose largest lens spans 1.6-meters, a 3.2 Giga-pixel CCD focal plane covering 10 square degrees, and a data acquisition capable of reading out the focal plane in 2 seconds. The Camera utilizes a range of innovative technologies to meet its demanding requirements, and its assembly ranges from precision mechanisms with tight tolerances and the handling of very large and very high value equipment.

The LSST Camera Integration and Test Engineering Manager will become a member of the SLAC engineering staff

and will report to the Camera Project Manager and collaborate with the I&T system Physicist.

Specific responsibilities of the I&T Engineering Manager include (but are not limited to):

- Management of the Camera Integration & Test (I&T) sub-system with a budget of approximately $12M.
- Technical leadership of the I&T sub-system. Scope of the I&T sub-system includes: the design, prototyping, construction and commissioning of I&T specific fixtures, hardware and test equipment; interfaces with all other Camera sub-systems; assembly and integration of all Camera sub-system deliverables; system verification testing; documentation.
- Provide engineering supervision and technical guidance for the I&T team of engineers, designers and technicians. The I&T team currently includes four engineers, one designer and several technicians.
- Budget, schedule and earned value management for the I&T sub-system. The Engineering Manager is responsible for keeping I&T on budget and on schedule, identifying and justifying schedule and budget variances or baseline change requests, and is accountable for earned value management.
- Technical management of I&T plans, procedures and Work Planning & Control. This includes defining procedures, travelers, inventory control, non-compliance reports, test data products and scripts, and overall workflow, as part of I&T processes.
- Represent Camera I&T inside the LSST Camera Project and in interactions with the LSST Observatory for summit integration and commissioning.
- Identify, analyze and mitigate hazards and risks during I&T.
- Commitment to a safe workplace environment and adherence to SLAC Environment Safety and Health procedures.
- Oversight of the LSST Class 1000 clean-room facility.

Minimum Requirements:

- BS in engineering or a related field.
- 10 years of relevant technical experience and a record of technical accomplishment.
- Experience managing a technical team.
- Experience with project management including budgets, schedules and earned value management.
- Excellent verbal and written communication skills and the ability to work in an intense fast-paced environment of technicians, engineers, and scientists.

Desired Skills:

- MS or PhD in engineering or a related field, preferably in Mechanical Engineering.
- Experience with the construction of scientific instrumentation, preferably in astronomy or physics.

If interested in applying, please follow the link:
https://chk.tbe.taleo.net/chk01/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=2411

SLAC Manager Competencies:

- **Results Through Others:** Achieves expected results by effectively delegating and managing the work of others.
- **Aligns Priorities:** Ensures planning and prioritization of resources and work efforts; ensures alignment of direct and matrix reports to support organizational goals and business plans.
- **Applies Lab Acumen:** Maintains understanding of lab efforts and direction as well as current research and trends, considers technology and customer impacts, and contributes relevant, informed ideas to lab growth.
- **Navigates Complexity:** Demonstrates effective problem-solving and decision-making in complex situations; manages a multitude of information and circumstances to discern what is most important; takes appropriate action, even with conflicting data or in difficult situations.
- **Communication:** Ensures effective information flow to various audiences and creates and delivers clear, appropriate written, spoken, presented messages.
- **Relationships:** Builds relationships to foster trust, collaboration, and a positive climate to achieve common

goals.

- **Self-awareness:** Seeks feedback from others and takes ownership of, and actions to address what is learned; recognizes impact on others and adjusts as needed; pursues continuous learning opportunities; implements a meaningful development plan.
- **Team Effectiveness:** Effectively motivates team members and fosters a diverse and collaborative environment; leverages individual members' strengths for overall team effectiveness; incorporates insights to improve team operations.
- **Purpose & Vision:** Articulates a clear vision of expected outcomes; inspires others to execute work plans and feel a sense of purpose and ownership for the mission.
- **Attracts & Develops Employee Talent:** Plans for, attracts, and hires the right talent for current and future organizational needs; operates with a focus on growing internal talent through organizational and staff development; values and encourages continuous growth development through a blend of work experiences, coaching, and formal learning; aligns individual development with organizational needs and objectives.

PHYSICAL REQUIREMENTS*:

- Frequently sit, grasp lightly, use fine manipulation and perform desk-based computer tasks, lift, carry, push pull objects that weigh to ten pounds.
- Occasionally sit, use a telephone or write by hand.
- Rarely kneel, crawl, climb, twist, bend, stoop, squat, reach or work above shoulders, sort, file paperwork or parts, operate foot and hand controls.

* - Consistent with its obligations under the law, the University will provide reasonable accommodation to any employee with a disability who requires accommodation to perform the essential functions of his or her job.

WORK STANDARDS:

- Interpersonal Skills: Demonstrates the ability to work well with Stanford colleagues and clients and with external organizations.
- Promote Culture of Safety: Demonstrates commitment to personal responsibility and value for safety; communicates safety concerns; uses and promotes safe behaviors based on training and lessons learned.
- Subject to and expected to comply with all applicable University policies and procedures, including but not limited to the personnel policies and other policies found in the University's Administrative Guide, http://adminguide.stanford.edu.

SLAC National Accelerator Laboratory is an Affirmative Action / Equal Opportunity Employer and supports diversity in the workplace. All employment decisions are made without regard to race, color, religion, sex, national origin, age, disability, veteran status, marital or family status, sexual orientation, gender identity, or genetic information. All staff at SLAC National Accelerator Laboratory must be able to demonstrate the legal right to work in the United States. SLAC is an E-Verify employer.

Final candidates are subject to background checks prior to commencement of employment at the SLAC National Accelerator Laboratory.

Internal candidates, who are selected for hire, may require degree verification and/or credit checks

based on requirements of the new position.