How to Apply

Upper division undergraduate students and early graduate students in all scientific disciplines are encouraged to apply. Students must be enrolled in an accredited university and in good academic standing. U.S. citizenship preferred, however exceptions will be considered based on strength of application.

To apply:

- Submit a current resume
- Letter of intent describing research interests, strengths, goals, and interest in the program.

Send all application materials to:

Information Science & Technology Institute
Los Alamos National Laboratory
Mail Stop T011
Los Alamos, NM 87545

or

Email: apply-parallelcomputing@lanl.gov

Application Deadline February 5, 2016
Notification by early March 2016

Compensation

Los Alamos National Laboratory offers very competitive compensation:

- 10 week salary of $7-10K (based on education and experience)
- Reimbursement for approved travel costs

High in the mountains of Northern New Mexico, the parallel finger mesas of Los Alamos provide a fitting location for Parallel Computing Summer Research.

Los Alamos, New Mexico provides the perfect backdrop for a summer of hiking, biking, rock climbing, running, and immersing yourself in cutting-edge HPC.

Sponsor

The Parallel Computing Summer Research Internship is funded by the Information Science & Technology Institute (ISTI) at Los Alamos National Laboratory. ISTI facilitates scientific collaboration and scholarship.

Visit isti.lanl.gov to learn about other summer programs in data science, co-design, clusters, and computational physics.

ISTI
INFORMATION SCIENCE & TECHNOLOGY INSTITUTE

NNSA
National Nuclear Security Administration

LA-UR-15-28310

Los Alamos
NATIONAL LABORATORY
EST.1943

2016 Parallel Computing Summer Research Internship

Solving complex scientific and national problems on next-generation supercomputers

http://parallelcomputing.lanl.gov

The Parallel Computing Summer Research Internship is an intense 10-week program aimed at providing students with a solid foundation in modern high performance computing (HPC) topics integrated with research on real problems encountered in large-scale scientific codes.

Description

During the 10 week program, students will receive training and lectures on modern topics in HPC and software development, including

- parallel programming,
- programming models,
- algorithms,
- hardware architecture and its impact on code design choices,
- high-quality software development in collaborative environments,
- visualization and workflow.

Students will collaborate in teams to identify and investigate different computational problems within the scientific focus area, and implement solutions guided by mentors with scientific and computational expertise.

Students will work on cutting-edge HPC hardware and gain hands-on experience.

Students

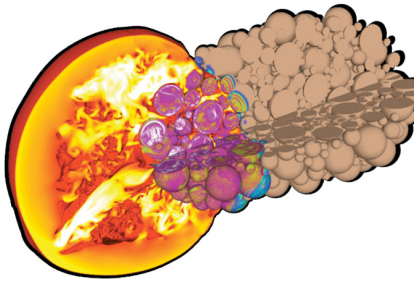
This highly-selective program is designed for upper division undergraduates to early graduate students from all science fields. As a general guideline, students should have basic experience with a scientific computing language, such as C, C++, Fortran and with the LINUX operating system.

Duration & Location

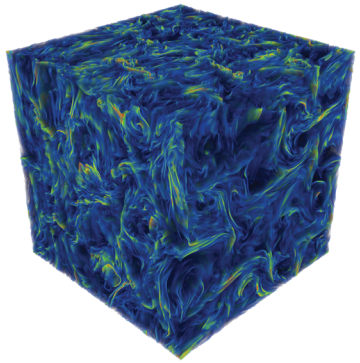
The program will last ten weeks, June 6 through August 12, 2016, and will be held at Los Alamos National Laboratory.

Students must be available to live and work in Los Alamos, New Mexico.

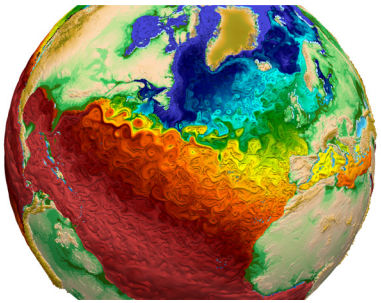
Solving Next-Generation Science @ Extreme Scales



How would the detonation of a nuclear energy source affect an incoming asteroid?



How do turbulent plasmas behave in star formation?



How are global water-surface temperatures changing?

Los Alamos National Laboratory *provides cutting-edge supercomputers to solve complex scientific and national problems. Trinity, pictured here, can provide 1015 floating point operations when it becomes available in 2016.*