



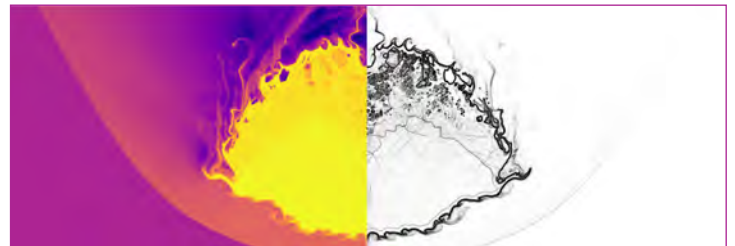
Defense Science & Technology 2024 Summer Student Internships

We have opportunities for student interns to conduct research in fields such as nuclear physics, radiation transport, hydrodynamics, astrophysics, plasma dynamics, numerical methods, and computer science supporting national security for the Strategic Deterrence Directorate.

Research projects combine theory with computation and are geared to further the students' educational goals. During the summer, students work directly with laboratory mentors in their fields of research. Internship opportunities are available for highly qualified candidates at all levels of undergraduate or graduate education. Internships are for 3 months during the summer. Students must arrive in May or June, work for three months and depart in August or September.

Lawrence Livermore National Laboratory

LLNL (www.llnl.gov) applies science and technology to important problems related to national security including nuclear weapons stockpile stewardship, nonproliferation, and homeland security. In support of this mission, the laboratory has a history of and continues to pioneer technical innovations in many areas including high-energy-density physics, high-performance scientific computing, and inertial confinement fusion. LLNL is one of this country's largest and finest research and engineering laboratories, and is located in beautiful Northern California.



2023 Student Project

When the bow shock of a hypersonic aircraft strikes a raindrop, it deposits baroclinic vorticity on the surface, leading to fluid dynamic instabilities, which subsequently break up the droplet. When the droplet hits the nose of the aircraft, it can damage the vehicle's thermal protection system. The above image shows the state of a droplet shortly after passing through a Mach 30 shock. PhD student Calvin Young of Texas A&M University, in collaboration with Andy Cook of LLNL, is investigating the response of atmospheric droplets to shocks of various Mach numbers.

Application Deadline: Jan. 16, 2024



<https://sd.llnl.gov/careers/students>

Graduate Student Internship:

Job #REF5052U

Graduate Computational Student Internship:

Job #REF5053H

Undergrad Student Internship:

Job #REF5051V