

High-Energy-Density Physics Program 2021 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 Weapons and Complex Integration 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.

Application Deadline: Jan. 18, 2021

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

Graduate Student Internship: Job #107334

Undergrad Student Internship: Job #107332

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.

2020 student project

Regions bounded by trimmed high-order parametric surfaces, like the Utah teapot, arise in many finite element simulation paradigms, including multiphysics simulations at LLNL. PhD candidate David Gunderman (CU Boulder) is working with mentors Kenny Weiss and Jin Yao to develop efficient computational methods for finding intersections and integrals over these types of complicated regions.

