



Project Title

Low Yield Nuclear Monitoring - Radionuclide Gas Migration Modeling

Project Reference Code: DNDO-LANL-Harp

Hosting Site

Los Alamos National Laboratory
Los Alamos, NM

Project Description

The student will apply existing numerical simulators for subsurface mass and heat transport (FEHM (<https://fehm.lanl.gov>) and PFLOTRAN (<http://www.pflotran.org>) to handle advanced physics of multiphase/multicomponent transport, isotope fractionation, barometric pumping, radioactive decay, and discrete and generalized fracture representation. The student will work in the Subsurface Flow and Transport Team in the Computational Earth Science Group. Information regarding some of the past and current projects in the Computational Earth Science Group can be found at <http://www.lanl.gov/org/padste/adcles/earth-environmental-sciences/index.php>

Disciplines

Earth Sciences
Physics of Fluids
Computer Systems Design (including Signal Processing)
Geochemistry
Engineering Physics

Mentor(s)

Dylan Harp, dharp@lanl.gov, 505-667-5532
Philip Stauffer, stauffer@lanl.gov, 505-665-4638

Internship Coordinator

Scott Robbins, srobbins@lanl.gov, 505-667-3639

The name and contact information of the hosting site internship coordinator is provided for further assistance with questions regarding the hosting site; local housing availability, cost, or roommates; local transportation; security clearance requirements; internship start and end dates; and other administrative issues specific to that research facility. If you contact the internship coordinator, identify yourself as an applicant to the DNDO Summer Internship Program.

Interns will not enter into an employee/employer relationship with the Hosting Site, ORAU/ORISE, DHS, DNDO or DOE. No commitment with regard to later employment is implied or should be inferred.