Nathaniel J. Roth

Graduate Institution: University of California-Berkeley

Graduate Discipline: Physics

Hometown: Dresher, PA

Relevant SC Research: High Energy Physics

Research Interest:

I develop and apply computer simulations to help answer questions in astrophysics and cosmology. Currently I am working with Daniel Kasen, Phil Hopkins, and Eliot Quataert to perform detailed radiative transfer calculations that will help explain how super-massive black holes at the centers of galaxies grow. I am also interested in exploring ways to self-consistently couple radiative transfer calculations to hydrodynamics simulations. This fall I will enter my fourth year of graduate study in physics at UC Berkeley. Outside of research, I help to organize the Berkeley Compass Project, an instructional and community-oriented program that brings together incoming undergraduates who have expressed an interest in scientific disciplines. I have played piano since I was six years old and am now learning to play Berkeley's 61-bell carillon.