Eli Joseph Fox

Graduate Institution: Stanford University

Graduate Discipline: Atomic Physics

Hometown: Ithaca, New York

Relevant SC Research: High Energy Physics



Research Interest:

I am interested in the use of laser-cooled atoms as a tool to investigate a broad range of phenomena. Of particular interest to me are the potential applications of cold atoms to metrology. For example, cold atoms can be used for magnetometry to investigate transport in condensed matter systems, or for an attempt to detect deviations in the scaling of the gravitational force from the inverse square law at short distances, providing a tabletop

test of predictions from some theories of high energy physics. I am also interested in the use of ultracold atomic gases for simulation of strongly correlated electron systems.

About Me:

I recently received my B.A. from Cornell University, where I majored in physics and mathematics. At Cornell, I worked with Prof. Mukund Vengalattore on a project to use Bose-Einstein condensates for high

precision magnetometry. In the coming fall, I will enter the graduate physics program at Stanford University to begin working towards a Ph.D. In the long term, I hope to become a college professor or a professional researcher, perhaps at a national laboratory. Outside of my work in physics, I enjoy hiking and camping, as well as playing hockey, soccer, and ultimate Frisbee.