Michael Ramm

Graduate Institution: University of California-Berkeley

Graduate Discipline: Physics

Hometown: Forest Hills, NY

Relevant SC Research: Basic Energy Sciences

Research Interest:

My primary research interests focus on using trapped ions to perform quantum simulations of models of solid state physics. Quantum simulations take a novel approach in the study of the models: we use trapped ions as building blocks to reconstruct the model of interest and, thus, emulate its behavior. This approach allows for unprecedented experimental control of all relevant parameters. We are currently focusing on the Frenkel-Kontorova model, which has been used to describe dry friction, and on energy transport in trapped ion strings.

About Me:

I am a graduate student in the Physics Department at UC Berkeley. I received my undergraduate degree at Stanford University, majoring in Physics and Mathematics. I joined Professor Haeffner's ion trapping lab in the Spring of 2009. Prior to joining the lab, I enjoyed serving as a Graduate Student Instructor for introductory physics classes. One of the highlights of my graduate career thus far has been presenting posters at the Division of Atomic, Molecular and Optical Physics (DAMOP) and Southwest Quantum Information and Technology (SQUINT) conferences. Outside the world of physics, I enjoy photography and playing and watching basketball.