

Kali Elena Wilson



Graduate Institution: University of Arizona

Graduate Discipline: Atomic Molecular and Optical Physics

Hometown: Morgantown, WV

Relevant SC Research: Basic Energy Sciences

Research Interest:

I work in the Bose-Einstein Condensation (BEC) lab at the University of Arizona under the supervision of Dr. Brian P. Anderson. Our specific areas of interest include studies of superfluid vortices, phase transitions, and two-dimensional quantum turbulence. Generally, we trap and cool atoms using a variety of optical and magnetic potentials, create an ultracold gas or a BEC, perturb the system, and then observe the subsequent dynamics. Our experiments take advantage of our ability to manipulate the BEC in a relatively easy manner and we hope to use our results to gain insight into more complicated superfluid and turbulent systems such as classical two dimensional turbulence. In addition, I work on the design and implementation of optical systems to manipulate and then image the BEC.

About Me:

I just completed my fourth year of working towards a PhD in Optical Sciences from the University of Arizona.

Prior to that I earned a B.A. in Physics from Wellesley College and taught high school physics for four years at The Governor's Academy, a small private boarding school located near Boston, MA. I hope to incorporate both teaching and research into my future career path. I am active in both the Women in Optics organization and the Student Optics Chapter of OSA and SPIE affiliated with the College of Optical Sciences. I help organize and staff optics outreach activities and most recently helped run our annual Laser Fun Day. I spend my free time growing food, cooking food and eating food. I counteract all that food with hiking, backpacking, rock climbing, and biking.



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