

What's Colder than Cold?

When we think of cold we think of places like Canada, Duluth, and life inside a polar vortex. We also think of matter such as liquid nitrogen, liquid helium, and dry ice. These places and things are cold, but over the past few decades there have been many advances in the field of manipulating atoms with lasers that have allowed for even colder regimes to be reached.

In his talk, Dr. Hazlett discuss how lasers are used to take atoms at temperatures greater than 500 Kelvin, down to within billionths of a degree from absolute zero! He will also describe the research he has done to characterize quantum interactions shifts that will allow for more precise atomic clocks, the simulation of condensed matter systems, and the prospects for trapping atoms in a hollow laser beam.



Eric Hazlett

Assistant Professor of Physics, Carleton College

Dr. Hazlett grew up on the plains of northern Colorado in a town of 900 people. He did his graduate work at Colorado State University where he received a B.S. in physics. While at Colorado State he was a part of the McNair Scholars program, heavily involved in SPS, and active in a traveling outreach program called “Little Shop of Physics”. For his graduate work he moved east to Penn State where he conducted research on ultracold Fermi gases. While at Penn State he was Sloan Minority Ph.D scholar. After Penn State he started to move back west by spending two years in Chicago as a post-doc studying two-dimensional Bose gases, before settling in across the Cannon at Carleton where he aims to create the coldest place in Minnesota. A distinction he does not take lightly.

Wednesday, December 3

Cookies and Apples Cider Served!