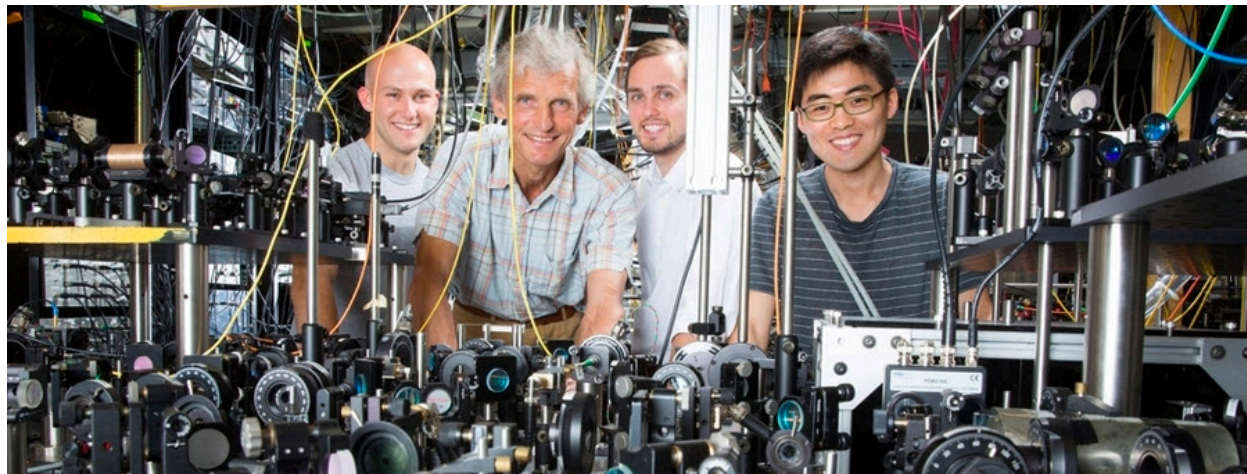


Free Virtual Public Lecture

New Forms of Matter Near Absolute Zero Temperature

Tuesday July 6, 7 PM MST



<https://cuboulder.zoom.us/j/92552351197>

Meeting ID: 925 5235 1197

Also streaming on the [BSS Physics School YouTube Channel](#)

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Why do physicists freeze matter to extremely low temperatures? Why is it worthwhile to cool to temperatures which are a billion times lower than that of interstellar space? In this talk, I will discuss new forms of matter, which only exist at extremely low temperatures. With the help of laser beams, gases of ultracold atoms can be transformed into crystals, insulators and magnetic materials, and recently into a supersolid which is gaseous, liquid and solid at the same time.

Wolfgang Ketterle is a professor of physics at the Massachusetts Institute of Technology. His research has focused on experiments that trap and cool atoms to temperatures close to absolute zero, and he led one of the first groups to realize Bose-Einstein condensation in these systems in 1995. For this achievement, he was awarded the Nobel Prize in Physics in 2001.



Sponsored by the Boulder School for Condensed Matter and Materials Physics, the National Science Foundation, and the University of Colorado Boulder Physics Dept.

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