

Public Lecture Series



Professor William D. Phillips

Nobel Prize in Physics, 1997

National Institute of Standards and Technology
College Park Professor & Distinguished University Professor,
University of Maryland

Wednesday, 2 April, 7pm
Bob Wright Centre, Room B150

Time, Einstein and the Coolest Stuff in the Universe

Presented by the **Department of Physics and Astronomy**

At the beginning of the 20th century Einstein changed the way we think about Time. Near the end of the 20th century scientists learned how to cool a gas of atoms to temperatures billions of times lower than anything else in the universe. Now, in the 21st century, Einstein's thinking, and ultracold atoms, are shaping one of the key scientific and technological wonders of contemporary life: atomic clocks, the best timekeepers ever made. Such super-accurate clocks are essential to industry, commerce, and science; they are the heart of the Global Positioning System (GPS), which guides cars, airplanes, and hikers to their destinations. Today, the best primary atomic clocks use ultracold atoms, achieve accuracies better than a second in 300 million years, and are getting better all the time. Super-cold atoms, with temperatures that can be below a billionth of a degree above absolute zero, use, and allow tests of, some of Einstein's strangest predictions.

This will be a lively, multimedia presentation, including experimental demonstrations and down-to-earth explanations about some of today's most exciting science.

Travel Green: UVic is accessible by many modes of sustainable transportation including Regional transit, cycling, walking and by taxi. Should you choose to drive, pay parking is in effect for a \$2.25 evening rate.

Free and open to the public | Seating is limited | Please RSVP at www.phys.uvic.ca

Persons with a disability requiring accommodation for this lecture should call 250.721.7698 at least 48 hours in advance.
For more information on this lecture phone 250.721.7698