



## Lecture series has new twist

'Physics Cafe' bridges gap between normal people, Nobel laureates

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There might be a few people who truly understand when Nobel Laureate Dr. Wolfgang Ketterle gives the first physics lecture this year: "New Forms of Quantum Matter Near Absolute Zero Temperature." Then again, there might not.

However, those without doctorates in physics have a new opportunity to bridge the gap between normal folk and Nobel laureate this year with the "Physics Café," starting an hour and a half before the lecture. The café will feature two prominent physicists giving a short presentation on the subject of the lecture, with plenty of time for mingling and questions.

Both events will be at the Wheeler Opera House tonight. The café starts at 6 p.m., and Ketterle will speak at 7:30.

After last summer's successful Aspen Science Center's Physics BBQs, the center decided to bring young people together again with the top physicists in the country visiting Aspen.

"String theory came out of here," said Kevin Ward, executive director of the Aspen Science Center. "Black holes came out of here. This is a real wellspring for discoveries in theoretical physics."

The first winter conference at the Aspen Center for Physics was in 1985. The conferences unite top physicists in a specific area to brainstorm, talk and think. The lecture series is an attempt to help bring some of that brainpower into the community.

"We try to get lecturers who will be able to deliver it in layman terms. This workshop will be about 60 physicists from all over the world," said Jane Kelly, administrative vice president of the Aspen Center for Physics. "It's a talent, they have to do it in a different language."

Ward said that he hopes the café - which, along with the lectures, is funded in part with support from Nick and Maggie DeWolff - will make the lectures and ideas more accessible to young people. He has brought together the science teachers in the valley and hopes that many will encourage their classes to take advantage of the café and lectures.

"My theory is that you can teach anyone anything," Ward said. "If a seventh-grader can learn Mandarin Chinese, then they can learn quantum physics."

Carlos Sa De Melo and Randall Hulet, two of the physicists here for the conference on condensed matter physics, will pair up to deliver a short presentation for the first Physics Café.

"We have this conference coming up on cold atoms," Sa De Melo said. "I will be telling them why this is exciting and what we can learn about standard matter at very low temperatures. I will try to show the connections this has with other areas of physics such as neutron stars and superconductors."

Sa De Melo said that he is a theorist while Hulet is an experimentalist, so they should be able to fill out the lecture quite well and field a wider variety of questions.

"It will be very informal," he said. "We'll take questions and go from there."

Ward came up with the idea for the café in part because many of his professors in college urged him and other students to come to their office and chat, though few took advantage of the offer. When he took the plunge and went to visit his professor John Kenneth Galbraith, a major figure in modern economics, Ward realized that Galbraith not only wanted to talk but was a wonderful person.

"No one ever visited him," Ward said. "Eventually we would go to the faculty club every Friday. It's just taking the opportunity to connect with guys who seem distant because their accomplishments are superhuman."

Dr. Ketterle's accomplishments certainly seem that way - for example, winning the 2001 Nobel Prize in physics for his work with the Bose-Einstein condensate.

The lecture and the café are free to the public. Both will be at the Wheeler, with the café taking place in the lobby.

<b>Nick and Maggie DeWolf Winter Lecture Series 2006</b>

<b>Monday, Jan. 16 -</b> Condensed Matter Physics

Professor Wolfgang Ketterle, MIT

New Forms of Quantum Matter Near Absolute Zero Temperature

<b>Wednesday, Jan. 25 -</b> Astrophysics

Professor Lawrence Krauss, Case Western Reserve University

Hiding in the Mirror: The Mysterious Allure of Extra Dimensions

<b>Wednesday, Feb. 8 -</b> Cosmology

Professor Leo Blitz, UC-Berkeley

Exploring Cosmic Origins with the Next Generation of Telescopes

<b>Wednesday, Feb. 15 -</b> Elementary Particle Physics

Professor John Womersley, Rutherford Appleton Lab, U.K.

The Quantum Universe

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