THE UNIVERSITY OF HONG KONG
COLLOQUIUM SERIES IN PHYSICS DEPARTMENT

Polar molecules near absolute zero

Dr. Dajun Wang

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Time: **Thursday, November 8, 2012, 4:30 p.m.**
Venue: **Lecture Theatre T3, Meng Wah Complex, HKU**

Abstract:

The ability to form ultracold polar molecules promises to extend many of the recent advances of ultracold quantum gas physics to the molecule domain. The dipole-dipole interactions between these molecules in addition provide many possibilities in the strong interaction regime not accessible with atoms. In the first part of my talk, I will review some of the recent experimental breakthroughs in the field of ultracold polar molecules, including the successful production of the first near quantum degeneracy sample and the observation of exchange chemical reactions at nK temperatures. I will then report the CUHK ultracold quantum gas group's progress in this research direction.

About the Speaker:

Dr. Wang is an experimentalist working on ultracold quantum gases of atoms and molecules. He got his PhD degree from the University of Connecticut in 2007. After spending 3 years as a postdoc at JILA/University of Colorado, he joined the Chinese University of Hong Kong as an assistant professor in 2010.

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Physics colloquium series is organized to introduce cutting edge researches and new development in physics, designed to be *suitable to graduate and undergraduate students, and also to scientists working on different fields*. Each colloquium will generally start with an extensive introduction of the background of the field, followed by forefront research topics and results. The colloquium will serve as an education forum for students and laymen alike, and also serve as a platform for exchange and update their knowledge of various branches of physics among academic staff members.

Coffee and tea will be served 20 minutes prior to the colloquium

Anyone interested is welcome to attend

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