

University of Washington • Department of Physics

PHYSICS COLLOQUIUM

Oscar Vilches (UW Physics)

“Physical adsorption of simple gases and molecules revisited: from exfoliated graphite to carbon nanotube bundles and now to a single carbon nanotube ”

Monday, January 26th, 2009

4:00 PM, Ronald Geballe Auditorium, Rm. A-102

Abstract: The quasi two-dimensional phases formed by a variety of substances bound to a surface by weak van der Waals forces have been studied in great detail over the last 40 years. Perhaps the most frequently used and studied substrate used to form these phases is basal plane graphite. In more recent times, carbon nanotubes in the form of bundles have been used for the same purpose, with the idea of finding one-dimensional phases of matter in bundle grooves and interstitials, and making contact with the two-dimensional adsorbed phases on graphite when coating the curved external surface of the bundles. During this past year, at least two groups have succeeded at observing the adsorption of the same simple atoms and molecules on one isolated carbon nanotube. In this talk I will review some universal aspects of physical adsorption focused on graphite, talk about our current understanding of adsorption on bundles, and describe the current experiments where we are measuring the adsorption of Ar and Kr on one single vibrating carbon nanotube with a sensitivity of tens of atoms. This work is being done in collaboration with Zenghui Wang and David H. Cobden, funded by NSF.

Tuesday, January 27th, 2009

Particle Theory Seminar

2:30 PM, Rm. C-421, PAT

Harald Ita, UCLA

Thursday, January 29th, 2008

CENPA Public Talk

2:30 PM, Conference room, CENPA

Ben Monreal, UC Santa Barbara

Astronomy Colloquium

4:00 PM, Rm. A-102, PAA

Miguel Morales, UW Physics

“21cm Cosmology”

Friday, January 30th, 2008

Nuclear Theory Seminar

9:30 AM, Rm. C-421, PAT

Alex Gezerlis, LANL

“Pairing in Neutron matter and in Cold Atomic Systems”

Nuclear Theory Seminar

10:30 AM, Rm. C-421, PAT

Risa Sharma, LANL

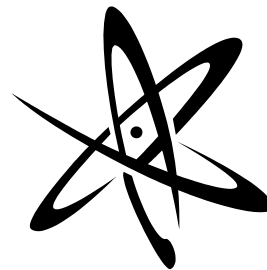
Postdoc Candidate Talk

Particle Astrophysics Seminar

3:30 PM, Rm. A-114, PAA

Kevin Connolly, UW Physics

Seminars



Jan 26th-30th

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