

PHYSICS COLLOQUIUM, partially funded by the GSFEI

N. Peter Armitage (Staffing Candidate)
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**“ANGLE-RESOLVED PHOTOEMISSION AS A
MOMENTUM SPACE MICROSCOPE”**

Monday, March 1, 2004

4:00 P.M., Ronald Geballe Auditorium, A-102, PAA
Reception at 3:45 P.M. in the lobby

Abstract: Recent years have seen a minor revolution in the imaging of the electronic structure of solids using angle-resolved photoemission. The advances in energy and momentum resolution parallel those in real space scanning probe microscopies to the extent that modern angle-resolved photoemission can be viewed as a momentum space microscope. In this talk I will discuss these advances and show how they are changing the questions we ask and also the kind of answers we can get about complex condensed matter systems. I will give an overview of the technique and give some examples which highlight the new and interesting physics being probed. These include one-dimensional wires showing spin-charge separation, self-assembled nanostructures on surfaces, quasi-2D metals, and high-temperature superconductors. The case of high-temperature superconductors is particularly illustrative of the power of the technique and I will show how such measurements give new insight into issues regarding this unresolved problem.

Tuesday, March 2, 2004

Particle Theory Seminar

2:30 P.M., Rm. C-421, PAT

Christophe Grojean, CEA Saclay

“HOW TO DO ELECTROWEAK PHYSICS WITHOUT A HIGGS”

Condensed Matter Seminar

4:00 P.M., Rm. C-421, PAT

N. Peter Armitage (Staffing Candidate), Department of Physics & Astronomy, UCLA

“A ‘TAXONOMY’ OF ELECTRON GLASSES”

Thursday, March 4, 2004

General Exam

10:00 A.M., Rm. C-520 PAT

Jackson Wu, UW Physics

“TWISTED MASS LATTICE QCD: AN EXPLORATION”

Astronomy Colloquium

4:00 P.M., Rm. A-102 PAA

Kem Cook, LLNL

“TBA”

Special Colloquium

4:00 P.M., Rm. C-520, PAT

Jack Harris (Staffing Candidate), Harvard/MIT

“COLD ATOMS WITHOUT LASER COOLING: THE FRONTIER OF BUFFER-GAS TRAPPING”

Friday, March 5, 2004

Particle Theory Seminar

12:30 P.M., Rm. B-042, PAB

TBA

General Exam

1:00 P.M., Rm. C-520, PAT

Maximilian Schlosshauer, UW Physics

“NEW APPROACHES TO QUANTUM DECOHERENCE AND THE MEASUREMENT PROBLEM”

Condensed Matter Matter

1:30 P.M., Rm. C-421, PAT

Jack Harris (Staffing Candidate), Harvard/MIT

“FROM THE QUANTUM HALL REGIME TO ‘SPIN FRICTION’ WITH MICROMECHANICAL DETECTORS”

Issues for Ethnic Minorities and Women in Science & Engineering

1:30 P.M., Bagley 154

Carlos Rodriguez, Principal Research Scientist, Pelavin Research Institute of the American Institutes for Research

“¡PONGA ATENCIÓN! PAY ATTENTION! EDUCATIONAL SUCCESS FOR MINORITIES, WOMEN AND PEOPLE WITH DISABILITIES IN STEM”

Astrophysics Seminar

3:30 P.M., A-110, PAA

TBA

SEMINARS
March 1-5, 2004