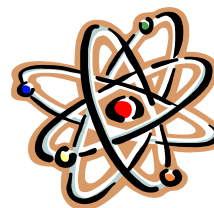


PHYSICS COLLOQUIUM

Seminars



Sanjay Reddy

Los Alamos National Lab

"The Nuclear Astrophysics of Neutron Stars"

Monday, February 25, 2008

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

February 25-29, 2008

Abstract: Advances in x-ray, gamma-ray and neutrino astronomy now enable us to obtain very detailed information about high energy astrophysical processes. Sanjay will describe how nuclear and neutrino physics plays an essential role in the interpretation of data relating to cosmic explosions and neutron star evolution. Core-collapse supernova, x-ray bursts, superbursts, and giant flares are powered by nuclear and weak interaction processes occurring inside neutron stars. Through theory and simulations we can identify and understand specific correlations between the underlying nuclear physics and the astrophysical observations. He will outline how the interplay between theory, simulation and observations has the potential to address fundamental questions relating the nature of matter at supranuclear density, the dynamics of neutrinos in dense environments, and possibly provide insights about physics beyond the standard model.

Tuesday, February 26

Condensed Matter Seminar

4:00 PM, Rm. C-421, PAT

Mikhail Mogilevsky, Novosibirsk

"Crystalline lattices under extreme conditions"

Thursday, February 28

Joint INT/Bartol General Exam

3:00 PM, Rm. C-520, PAT

Joseph Wasem, UW Physics

Astronomy Colloquium

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

Martin White, UC Berkeley

"The echo of Einstein's greatest blunder"

Friday, February 29

Physics Final Exam

11:30 AM, Rm. C-520, PAT

Theresa Bullard, UW Physics