WEEKLY CALENDAR

April 21-25, 2014

DEPARTMENTAL COLLOQUIUM

"Heavy Element Synthesis in the Universe"

3:30 PM April 24, 2014
109 Nicholson Hall

Enrico Ramirez-Ruiz
University of California, Santa Cruz
Host: Gabriela Gonzalez

• Refreshments served at 3:10 PM in 232 (Library) Nicholson Hall •

The source of about half of the heaviest elements in the Universe has been a mystery for a long time. Finding out whether they can be made in compact binary mergers requires extensive astronomical observation and sophisticated computer modeling.

SPECIAL COLLOQUIUM

“Nonlinear Optics at the Nanoscale”

2:00 PM Monday, April 28, 2014
435 Nicholson Hall

Eric Mazur
Harvard University

Host: John DiTusa

LA-SIΓMA

Spring Seminar

David Cory
University of Waterloo

“Realizing Quantum Information Processors”

3:30pm - 4:30pm, Wednesday, April 2,3 2014
1034, Digital Media Center, Louisiana State University

PUBLICATIONS:

Spring Seminar
3:30pm - 4:30pm, Wednesday, April 23, 2014
1034, Digital Media Center, Louisiana State University

Realizing Quantum Information Processors
By
David Cory
University of Waterloo, Canada

Quantum mechanics is the ultimate law of nature and when we can build a device that behaves uniquely quantum mechanically then we may achieve the highest efficiencies allowed by nature. One of the most compelling applications of quantum devices is for information processing. I will describe laboratory scale, small quantum processors: including a bit about how they work and what they are useful for. I will discuss some near term quantum devices, sensors and actuators that are emerging from laboratories. Finally I will include a brief perspective of where we are on the path to building a general-purpose quantum computer.

Dr. David G. Cory, holds the Canada Excellence Research Chair in Quantum Information Processing at the University of Waterloo. There he is a Professor of Chemistry, a member of the Institute of Quantum Computing and of the Waterloo Institute of Nano Technology. He is an associate of the Perimeter Institute for Theoretical Physics. He chairs the advisory committee for the Canada Institute for Advanced Research’s Quantum Information Processing program. He is an experimentalist working to develop spin-based examples of quantum processors.

UNO – 234, Liberal Arts Building – LATech – 122, Nethken Hall
SUBR – 211 J.B. Moore Hall – Xavier – 226 Qatar Pavillion

Note, this seminar will Only be available through HD Videoconferencing.