Kennesaw State University

College of Science and Mathematics

Department of Physics

Physics Colloquium - Spring 2016 schedule

Thursdays, 2:00 – 3:00pm

Joe Mack Wilson Student Center, A 216 (Marietta Campus)

Thursday, September 29, 2016

- *"Atomic Layer Deposition and its applications"*
- **Dr. Kallol Pradhan**, Department of Physics, Kennesaw State University
- ABSTRACT: Atomic layer deposition (ALD) is a vapor phase deposition technique, which can control thickness with atomic level precision while conformably deposit thin films over large area, and high aspect ratio structures. These characteristics have made ALD very promising in microelectronics and energy conversion technologies. In this presentation, I will talk about the ALD technologies and its various applications especially for memory devices. I will also talk about how in-situ studies; especially synchrotron radiation light source based studies can help us understand the initial thin film growth process, which is essential for better device fabrication.

Thursday, October 27, 2016

- *"What is the MUSCEL behind Low Surface Brightness Galaxies?"*
- **Dr. Rachel Kuzio de Naray**, Department of Physics & Astronomy, Georgia State University

Thursday, November 17, 2016

- *"Binary Black Holes"*
- **Dr. Erin Bonning**, Director of Emory Planetarium, Department of Physics, Emory University
- ABSTRACT: In February of this year, the LIGO collaboration announced the spectacular discovery of gravitational radiation emitted from the coalescence of two black holes. Apart from confirming the existence of a phenomenon predicted by general relativity, binary black holes have been of general astrophysical interest for years due to the insights they can provide into stellar evolution, galaxy interactions, and active galactic nuclei. This talk will discuss observations of binary black holes in their astrophysical context, the interactions of these black holes with each other and with their environment, and what we can expect to learn from the future of gravitational wave astronomy.

Thursday, December 1, 2106

- Student Presentations