# 2016 FIU Department of Physics Seminars

#### **Turbulence in The Relativistic Universe**

Dr. Jonathan Zrake, Kavli Institute for Particle Astrophysics and Cosmology *Jan. 22, 2016* 

#### Panther Alumni Week special talk-Atomic Membranes

Professor J. Scott Bunch Department of Mechanical Engineering and Division of Materials Science and Engineering Boston University *Feb. 5, 2016* 

# The Mu2e Experiment

Alumni Dr. Jason Bono will visit FIU Physics and give a colloquium on his research project in Fermilab

Feb. 12, 2016

# ALCHIM: Using 1H NMR to measure the Length of Fatty Acids

Dr. Joseph Sachleben is a Research Scientist and Technical Director of University of Chicago's Biological Sciences NMR facility.

Feb. 25, 2016

# **Excitonic Resonant Emission-Absorption of Surface Plasmon in Transition Metal Dichalcogenides**

Professor Jiming Bao from Department of Electrical and Computer Science, University of Houston, will give a colloquium talk on his research in nanophotonics and nanomaterials. *March 4, 2016* 

#### LIGO, squeezed states of light, and nonlinear light-atom interactions

Dr. Eugeniy Mikhailov from the College of William & Mary will give a talk on his research in quantum optics.

April 1, 2016

# **Photopatterning of Molecular Orientation in Liquid Crystals**

Professor Qihuo Wei from Kent State University will give a talk on soft matter Physics. *April 15, 2016* 

# **Nuclear Physics in Proton Therapy**

Professor Cynthia Keppel Hall A and C Experimental Group Leader Thomas Jefferson National Accelerator Facility Community Faculty, Department of Radiation Oncology and Biophysics Eastern Virginia Medical School Senior Executive Director Hampton University Proton Therapy Institute

April 22, 2016

# Light with a twist: an introduction to twisted light with orbital angular momentum

Mark Siemens, Assistant Professor of Physics & Astronomy at the University of Denver *April 29, 2016* 

# Active learning and adaptive testing in a large enrollment physics class

Professor Joerg Reinhold will give a talk on Physics Education Sept. 2, 2016

#### **Materials under Extreme Conditions**

Professor Jiuhua George Chen, Professor of Materials Engineering, Director of CeSMEC, FIU Sept. 23, 2016

# Modeling Biophysical Processes at the Bio-Nano Interface

Dr. Binquan Luan From IBM research lab will give a talk on Theoretical Biophysics *Sept. 30, 2016* 

# Tailored Colloidal Nanocrystal Clusters of Iron-oxide for Diagnosis and Therapy

Professor Alexandros Lappas, Research Director, Institute of Electronic Structure and Laser, Foundation for Research and Technology (Greece)

Oct. 21, 2016

# Cell mechanics in 3D

Professor Robert Ros from Physics Department and Center for Biological Physics of Arizona State University will give a talk on Experimental Biophysics. This talk is supported by BSI. *Oct. 28, 2016* 

# **Broken Symmetry and Magnetic Skyrmions**

Professor Sunxiang Huang from UM Physics Department will give a talk on experimental condensed matter physics

Nov. 4, 2016

#### **Proton Remains Puzzling**

Professor Haiyan Gao from Duke University Physics Department will give a talk on Nuclear Physics.

Nov. 18, 2016