Traditionally distinct scientific disciplines are merging to create new opportunities. Share the excitement and challenge through seminars and discussions with nationally recognized pioneers in science at the edge.

Fall Semester 2014

Seminars are on Fridays at 11:30 a.m., with refreshments served at 11:15 a.m.

1400 Biomedical and Physical Sciences Building (unless noted otherwise)

August 29 - Quantitative Biology/Gene Expression in Development & Disease Seminar
Mark Rebeiz, Department of Biological Sciences, University of Pittsburgh
*Morphological Evolution: The Modification and Origin of Nodes and Networks in Development*

September 5 - Interdisciplinary Physics Seminar
Hiroshi Yamaguchi, NTT Basic Research Laboratories, NTT Corporation
*Nonlinear Interaction and Coherent Phonon Dynamics in Electromechanical Resonators*

September 12 - Interdisciplinary Physics Seminar
Michael C. Tringides, Department of Physics and Astronomy, Iowa State University and Ames Laboratory, USDOE
*Epitaxial Growth and Control of Metal Nanostructures on Graphene*

September 19 - Quantitative Biology/Gene Expression in Development & Disease Seminar
Benjamin de Bivort, Department of Organismic and Evolutionary Biology, Harvard University
*The Neurobiology of Individuality*

September 26 - Quantitative Biology/Gene Expression in Development & Disease Seminar
Patrick van der Wel, Department of Structural Biology, University of Pittsburgh
*Solid-state NMR Studies of Amyloid Formation by Polyglutamine and Huntington Fragments*

October 3 - Quantitative Biology/Gene Expression in Development & Disease Seminar
Lauren McIntyre, Center for NeuroGenetics, University of Florida
*Allele Specific Expression in Drosophila*

October 10 - Interdisciplinary Physics Seminar
Predrag Cvitanovic, Center for Nonlinear Science, School of Physics, Georgia Institute of Technology
*Noise is Your Friend, or: How Well Can We Resolve State Space?*

October 17 – Interdisciplinary Physics Seminar
Anne Andrews, Department of Psychiatry and Paul Weiss, Department of Chemistry and Biochemistry, California NanoSystems Institute, University of California, Los Angeles
*Developing Nanoscale Measurements for the Brain*

October 24 – Engineering Seminar
Richard Register, Department of Chemical and Biological Engineering, Princeton University
*Block Copolymer Thin Films: Structure, Shear Alignment, and Applications in Nanofabrication*

October 31 - Interdisciplinary Physics Seminar
Mark Dykman, Department of Physics and Astronomy, Michigan State University
*Fluctuating Nonlinear Oscillators: From Nanodynamics to Quantum Superconducting Circuits*

November 7 - Quantitative Biology/Gene Expression in Development & Disease Seminar
Hunter Fraser, Department of Biology, Stanford University
*Adaptive Evolution of Gene Expression*

November 14 - Quantitative Biology/Gene Expression in Development & Disease Seminar
Sushmita Roy, Department of Biostatistics & Medical Informatics, University of Wisconsin-Madison
*Next Generation Regulatory Network Reconstruction: From Yeast to Mammals*

November 21 - Interdisciplinary Physics Seminar
John A. Woollam, Department of Electrical Engineering, University of Nebraska-Lincoln
*TBA*

December 5 – Engineering Seminar
Darrel Schlom, Department of Materials Science and Engineering, Cornell University
*Playing the “Strain Game” to Enhance the Properties of Oxides*

Organizers
Ruby Ghosh (ghosh@pa.msu.edu), Interdisciplinary Physics
Richard Lunt (rlunt@egr.msu.edu), Engineering
David Arnosti (arnosti@msu.edu) & George Mias (gmias@msu.edu), Quantitative Biology/Gene Expression in Development & Disease