MICHIGAN STATE UNIVERSITY

SCIENCE at the Edge

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 Origination 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 Huntingtin 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