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.

**Spring Semester 2008**

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)

**January 18 - Interdisciplinary Physics Seminar**
Jeff Schenker, Department of Mathematics, Michigan State University  
*The Mathematics of Currents Occurring in the Quantum Hall Effect*

**January 25 – Engineering Seminar**
John Brady, Dept. of Chemical Engineering, California Institute of Technology  
*The Osmotic Motor*

**February 1 - Quantitative Biology/Gene Expression in Development & Disease Sem.**
Ian Dworkin, Department of Zoology, Michigan State University  
*Using Weak Perturbations to Probe Gene Networks and Phenotypic Variation*

**February 8 - Interdisciplinary Physics Seminar**
Alan Hunt, Department of Biomedical Engineering, University of Michigan  
*Breaking the Diffraction Limit: Committing an Optical Misdemeanor for Microfluidics and Cell Biology*

**February 22 - Quantitative Biology/Gene Expression in Development & Disease Sem.**
Robin Buell, Department of Plant Biology, Michigan State University  
*Insights into the Rice Genome*

**February 29 - Interdisciplinary Physics Seminar**
Harry Dorn, Department of Chemistry, Virginia Tech  
*Fullerene-Based Nanomaterials for Biomedical and Information Technology Applications*

**March 21 - Quantitative Biology/Gene Expression in Development & Disease Sem.**
Jianguo Liu, Department of Fish & Wildlife, Michigan State University  
*Complexity of Coupled Human and Natural Systems*

**March 28 - Interdisciplinary Physics Seminar**
Shaul Mukamel, Department of Chemistry, University of California, Irvine  
*Coherent Nonlinear Optical Spectroscopy of Proteins: Femtosecond Analogue of Multidimensional NMR*

**April 4 – Engineering Seminar**
Ravi Kane, Department of Chemical and Biological Engineering,  
Rensselaer Polytechnic Institute  
*The Design of Nanoscale Therapeutics and Nanostructured Materials*

**April 11 – Engineering Seminar**
George Georgiou, Dept. of Chemical Eng., University of Texas at Austin  
*Engineering the Next Generation of Therapeutic Proteins*

**April 18 - Interdisciplinary Physics Seminar**
Olgica Bakajin, Department of Chemistry & Materials Science,  
Lawrence Livermore National Laboratory  
*Carbon Nanotube Nanofluidics*

**April 25 – Engineering Seminar**
Russ Composto, Dept. of Materials Science and Eng., Univ. Pennsylvania  
*Dispersion and Self-Assembly of Nanospheres and Nanorods in Polymer Nanocomposite Films*

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**Organizers**
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Quantitative Biology/Gene Expression in Development & Disease