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 2016**
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)

**September 16**
Simon Billinge, Applied Physics and Applied Mathematics at Columbia University and Condensed Matter Physics and Material Science Department at Brookhaven National Laboratory
*Some Recent Developments and Challenges in Nanostructure Determination: Making Nanoscience Great Again*

**September 23**
Jennifer Reed, Chemical and Biological Engineering, University of Wisconsin
*Systems Approaches for Exploring and Exploiting Microbial Metabolism*

**September 30**
Nate Lewis, Division of Chemistry and Chemical Engineering, California Institute of Technology
*Sunlight-Driven Hydrogen Formation by Membrane-Supported Photocatalytic Water Splitting*

**October 7**
Yu-Ping Wang, Department of Biomedical Engineering, Tulane University
*TBD*

**October 21**
Erwin Frise, Environmental Genomics & Systems Biology, Lawrence Berkeley National Laboratory
*New Strategies to Identify Transcription Factor Regulatory Relationships for Organ Development*

**October 28**
Stephano Allesina, Ecology and Evolution, University of Chicago
*Dynamics of Large Biological Systems*

**November 4**
Sarah-Maria Fendt, Vesalius Research Center, Belgium
*How the Nutrient Microenvironment Supports Metastasis Formation and Progression*

**November 11**
Huan-Xiang Zhou, Department of Physics and Institute of Molecular Biophysics, Florida State University
*Electrostatics in Protein Structure and Action*

**December 2**
Ronald M. Levy, Center for Biophysics & Computational Biology, Temple University
*Exploring Fitness and Free Energy Landscapes of Proteins for Allostery and Ligand Binding*

**December 9**
Stephen CJ Parker, Department of Computational Medicine & Bioinformatics, University of Michigan
*Computational Medicine & Bioinformatics*

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**Organizers**
Carlo Piermarocchi (carlo@pa.msu.edu) & 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