

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 2018

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)

MICHIGAN STATE
UNIVERSITY

September 7

Michael Harms, Institute of Molecular Biology and Department of Chemistry and Biochemistry, University of Oregon
Biophysics of Protein Evolution

September 14

Jef Boeke, Institute for Systems Genetics and Department of Biochemistry and Molecular Pharmacology, New York University
Designing a Eukaryotic Genome from the Bottom Up

September 21

Jose Avalos, Center for Energy and the Environment and Department of Chemical and Biological Engineering, Princeton University
Spatial and Temporal Control of Yeast Isobutanol Production with Subcellular Engineering and Optogenetics

October 5

David Kaplan, Institute for Nuclear Theory and Department of Physics University of Washington
Formulating Nonabelian Gauge Theories for a Quantum Computer

October 12

Peter Frazier, Operations Research & Information Engineering Department, Cornell University; and Staff Data Scientist, Uber Engineering
Bayesian Optimization for Materials Design and Drug Discovery

October 26

Sudin Bhattacharya, Biomedical Engineering, Michigan State University
Genome-Based Prediction of Critical Cellular Transitions in Health and Disease

November 2

Yuping Huang, Stevens Institute of Technology
Wireless Quantum Communication

November 9

Ting Wang, Department of Genetics, Washington University School of Medicine in St. Louis
Transposable Elements and Epigenome Evolution

November 16

David Cahill, Department of Materials Science and Engineering University of Illinois
Extremes of Heat Conduction in Materials

November 30

Anne Robertson, Department of Mechanical Engineering & Materials Science, University of Pittsburgh
Translating the Success of Tissue Engineered Blood Vessels for Young to Old Animals

December 7

Michael Boehnke, Center for Statistical Genetics and Department of Computational Medicine and Bioinformatics, University of Michigan
Identifying Genes for Type 2 Diabetes and Related Traits

Organizers

Carlo Piermarocchi (carlo@pa.msu.edu) & Ruby Ghosh (ghosh@pa.msu.edu)
Interdisciplinary Physics

Alexandra Zevalkink (alexzev@msu.edu), & Sara Roccabianca (Roccabis@msu.edu)
Engineering

David Arnosti (arnosti@msu.edu), & George Mias (gmias@msu.edu)
Quantitative Biology/Gene Expression in Development & Disease