

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.



MICHIGAN STATE
UNIVERSITY

Fall Semester 2019

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 6

Josh Welch, Computational Medicine and Bioinformatics, University of Michigan

Quantitative Definition of Cell Identity through Single-Cell Data Integration

September 13

Elizabeth Read, Department of Chemical and Biomolecular Engineering, University of California, Irvine

Noisy Dynamics in the Epigenome: Insights from Stochastic Modeling and Inference

September 20

Mattia Bacca, Department of Mechanical Engineering, University of British Columbia

Micromechanics of Living Systems

September 27

Sheila Teves, Department of Biochemistry and Molecular Biology, University of British Columbia

Transcriptional Memory and Dynamics in Embryonic Stem Cells

October 11

Iain Mathieson, Department of Genetics, University of Pennsylvania

Tracking the Evolution of Human Complex Traits with Ancient DNA

October 18

Albert Migliori, Los Alamos National Laboratory

Resonant Ultrasound Spectroscopy An Odyssey in Measurement Science

October 25

Tony Szedlak, Research and Development, Auto-Owners Insurance

Innovation in Industry: Machine Learning and Data Analytics at Auto-Owners Insurance

November 1

Yuri Lyubchenko, Department of Pharmaceutical Sciences, University of Nebraska Medical Center

Molecular Mechanisms of Proteins Self-Assembly in Aggregates by the On-Surface Catalysis Pathway

November 8

Carlo Piermarocchi, Department of Physics and Astronomy, Michigan State University

Spin Glass Models of Cancer Cells

November 15

Jens Schmidt, Department of Obstetrics, Gynecology & Reproductive Biology, Michigan State University

Using High-Resolution Optical Tweezers to Reveal the Mechanism of Processive Telomerase Catalysis

November 22

Elizabeth Holm, Department of Materials Science and Engineering, Carnegie Mellon University

Artificial Intelligence for Generating Materials Science Knowledge

December 13

Chiara Bellini, Department of Bioengineering, Northeastern University

Engineering Approach to Cardiovascular Health

Organizers

Lisa Lapidus (lapidus@pa.msu.edu) & Ruby Ghosh (ghosh@pa.msu.edu)
Interdisciplinary Physics

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

Alex Dickson (alexrd@msu.edu), & George Mias (gmias@msu.edu)
Quantitative Biology/Gene Expression in Development & Disease
