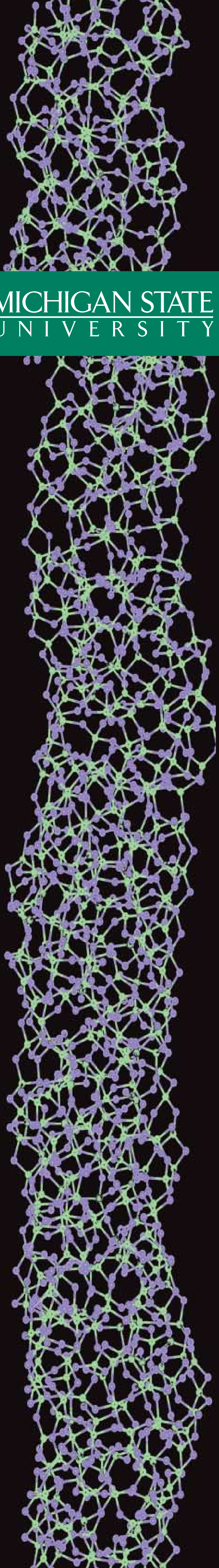

MICHIGAN STATE
UNIVERSITY

SCIENCE
at the Edge

Traditionally distinct science disciplines are merging to create new opportunities. Share the excitement and challenge each week through seminars and discussions with nationally recognized pioneers in science at the edge.

FALL SEMESTER 2004 ***MICHIGAN STATE UNIVERSITY***

Seminars Begin at 11:30 a.m.,
Refreshments Served at 11:15 a.m.
All Seminars are in Room 1400 Biomedical and Physical Sciences Building.

Friday, September 17 – Interdisciplinary Physics Seminar
Chong-Yu Ruan, Michigan State University, Physics and Astronomy
Ultrafast Electron Crystallography: An Atomic-Scale Structural and Dynamical Probe for Complex Systems

Friday, September 24 – Quantitative Biology and Modeling Seminar
Gavin Reid, Michigan State University, Chemistry
Quantitative Proteome Analysis by Stable Isotope Labeling and Mass Spectrometry

Friday, October 1 – Engineering Seminar
Kenneth S. Schweizer, University of Illinois at Urbana-Champaign, Departments of Materials Science, Chemistry, and Chemical & Biomolecular Engineering
Structure, Phase Separation, Gelation and Viscoelasticity of Nanoparticle-Polymer Suspensions

Friday, October 8 – Interdisciplinary Physics Seminar
Martin Caffrey, Ohio State University, Biophysics, Biochemistry and Chemistry
A Lipid's Eye View of Membrane Protein Crystallization in Mesophases

Friday, October 15 – Quantitative Biology and Modeling Seminar
Gianluigi Veglia, University of Minnesota, Chemistry
Probing Intramembrane Protein - Protein Interactions by NMR Spectroscopy

Friday, October 22 – Quantitative Biology and Modeling Seminar
Evan Dorn, California Institute of Technology, Computation and Neural Systems
*Life **Not** as We Know It: How Digital Life can Aid the Search for Extraterrestrial Organisms*

Friday, October 29 – Interdisciplinary Physics Seminar
John Rehr, University of Washington, Seattle, Department of Physics
Unraveling the Mysteries of Complex Systems with X-Ray Spectroscopy: Theory and Computation vs. Experiment

Friday, November 5 – Engineering Seminar
Kathryn Uhrich, Rutgers University
Biodegradable Polymers for Drug Delivery

Friday, November 12 – Quantitative Biology and Modeling Seminar
Isabel Novella, Medical College of Ohio, Medical Microbiology and Immunology
Peculiarities of RNA Virus Evolution

Friday, November 19 – Interdisiplinary Physics Seminar
Turab Lookman, Los Alamos National Laboratory, Theory Division
Elasticity-Driven Nanoscale Texturing in Functional Materials

Friday, December 3 – Engineering Seminar
Allen Minton, National Institutes of Health
Effects of Macromolecular Crowding Upon Protein Conformation and Stability

SEMINAR ORGANIZERS:

Michael E. Mackay, Department of Chemical Engineering and Material Science
mackay@msu.edu

Michael Feig, Quantitative Biology and Modeling Initiative
feig@msu.edu

Marianne Huebner, Quantitative Biology and Modeling Initiative
huebner@msu.edu

Charles Ofria, Quantitative Biology and Modeling Initiative
ofria@cse.msu.edu

Phillip Duxbury, Department of Physics and Astronomy
duxbury@pa.msu.edu