

# Hadronic and Electroweak Physics at MIT Bates Retrospective and Future Prospects

**Thursday, September 28      Bartos Theater, Wiesner Building (E15)**

**8:00    Continental breakfast/Registration**

Morning Session:      Chair, W. Turchinetz

8:30-8:40      **R. Silbey, Dean of Science**

*Welcome*

8:40-9:40      **S. Kowalski**

*Overview of Bates Physics and Technical Advances*

9:40-10:30      **D. Beck**

*Nucleon Structure from Parity-Violating Electron Scattering*

**10:30-10:50    Coffee Break**

10:50-11:40      **J. Negele**

*Exploration of Hadronic Physics using Lattice QCD*

11:40-12:30      **R. Alarcon**

*The Electromagnetic Form Factors of the Nucleon*

**12:30-1:30    Lunch**

Afternoon Session:      Chair, K. Dow

1:30-2:20      **C. Papanicolas**

*Exploring the Shape of the Nucleon from Out of Plane*

2:20-3:10      **X. Ji**

*Gluons in the Proton*

3:10-4:00      **B. Surrow**

*The High-Energy Polarized Proton-Proton Program at RHIC at BNL*

**4:00-4:15      move to 10-250 for Physics Department Colloquium**

4:15-5:15      Physics Department Colloquium

**D. Geesaman**

*Paths in Nuclear Structure*

**5:30-6:30      Wine and cheese reception, Bush Room 10-105**

**Friday, September 29**                      **Bartos Theater, Wiesner Building (E15)**

Morning Session:     Chair, T. Walcher

**8:00**                      **Continental breakfast/Registration**

**8:30-9:20**            **C. Tschalär**  
*Bates Accelerator, Detectors, etc.*

**9:20-10:10**        **W. Bertozzi**  
*EM Insights into the Structure of Nuclei*

**10:10-10:40**      **Coffee Break**

**10:40-11:30**      **R. Redwine**  
*Pion Physics in the Meson Factory Era*

**11:30-12:20**      **A. Bernstein**  
*Experimental Chiral Dynamics*

**12:30-1:30**        **Lunch**

Afternoon Session:    Chair, J. Calarco

**1:30-2:20**        **J. Formaggio**  
*The Quest for Neutrino Mass*

**2:20-3:10**        **J. Matthews**  
*Photonuclear Reactions*

**3:10-3:40**        **Coffee Break**

**3:40-4:30**        **M. Kohl**  
*Electromagnetic Studies with Polarized Deuterium*

**4:30-5:20**        **M. Garçon**  
*Tensor Polarization in Elastic Electron-Deuteron Scattering*

**6:00-7:00**        **Social Hour, Hotel@MIT**

**7:00-10:00**       **Banquet, Hotel@MIT**  
Banquet speaker: **E. Moniz** *Energy Policy*

**Saturday, September 30**      **Bartos Theater, Wiesner Building (E15)**

Morning Session:      Chair, W. Sapp

**8:30**              **Continental breakfast**

9:00-9:50      **N. Makins**

*HERMES: A Decade of Discovery*

9:50-10:40      **M. Pitt**

*Testing the Standard Model with Parity-Violating Electron Scattering*

**10:40-11:10**      **Coffee Break**

11:10-12:00      **G. Cates**

*The JLab Program moving into the 12 GeV Era*

12:00-12:50      **R. Milner**

*A High Luminosity Lepton-Ion Collider to study the Structure of Matter*