MONDAY, JUNE 16TH

9:00 AM   Full Breakfast (337 West hall)

9:30 AM   Welcoming Introduction – History of the Michigan Summer Schools
          Professor Jens Zorn (University of Michigan)

9:45 AM   Barbara Terhal (IBM Research)
          “Fault Tolerant Quantum Computation”

10:45 AM  Aephraim Steinberg (University of Toronto)
          “Optical Quantum Information Processing”

11:45 AM  LUNCH BREAK

1:00 PM   Lu Sham (UCSD)
          “Quantum Dot Qubits --- Theory”

2:00 PM   Duncan Steel (University of Michigan)
          “Quantum Dot Qubits --- Experiments”

3:00 PM   Coffee Break (337 West hall)

3:30 PM   Jun Ye (University of Colorado)
          “Art of Light-Based Precision Measurement”

4:30 PM   Poster Presentations and Discussions (in hall outside of lecture hall)

5:30 PM   Poster Session Concludes

TUESDAY, JUNE 17TH

9:00 AM   Full Breakfast (337 West hall)

9:30 AM   Wojciech Zurek (Los Alamos National Lab)
          “Decoherence and Beyond”

10:30 AM  Barbara Terhal (IBM Research)
          “Fault Tolerant Quantum Computation”

11:30 AM  LUNCH BREAK
1:00 PM Lu Sham (UCSD)  
“Quantum Dot Quibits --- Theory”

2:00 PM Duncan Steel (University of Michigan)  
“Quantum Dot Quibits --- Experiments”

3:00 PM Coffee Break (337 West hall)

3:30 PM Jun Ye (University of Colorado)  
“Optical Lattice of Sr”

4:30 PM Poster Presentations and Discussions (in hall outside of lecture hall)

5:30 PM Poster Session Concludes

WEDNESDAY, JUNE 18TH

9:00 AM Full Breakfast (337 West hall)

9:30 AM Barbara Terhal (IBM Research)  
“Fault Tolerant Quantum Computation”

10:30 AM Jun Ye (University of Colorado)  
“Cold and Ultracold Molecules”

11:30 AM LUNCH BREAK

1:00 PM Wojciech Zurek (Los Alamos National Lab)  
“Decoherence and Beyond”

2:00 PM David Weiss (Pennsylvania State University)  
“Neutral Atom Quantum Information”

3:00 PM Coffee Break (337 West hall)

3:30 PM Mikhail Lukin (Harvard University)  
“Quantum Networking with Atomic Ensembles & Diamonds”

4:30 PM Aephraim Steinberg (University of Toronto)  
“Optical Quantum Information Processing”

5:30 PM Talks Conclude

THURSDAY, JUNE 19TH

9:00 AM Full Breakfast (337 West hall)

9:30 AM Wojciech Zurek (Los Alamos National Lab)  
“Decoherence and Beyond”
10:30 AM  Mikhail Lukin (Harvard University)
“Quantum Networking with Atomic Ensembles & Diamonds”

11:30 AM  LUNCH BREAK

1:00 PM  David Weiss (Pennsylvania State University)
“Neutral Atom Quantum Information”

2:00 PM  Sankar Das Sarma (University of Maryland)
“Topological Quantum Computation and Beyond”

3:00 PM  Coffee Break (337 West hall)

3:45 PM  Contributed 20 Minute Talks

   Jason Kestner (University of Michigan)
   “Effective Low-Dimensional Hamiltonian for Strongly Interaction Ultracold Gas”

   Wei Zhang (University of Michigan)
   2D BCS-BEC Crossover and BKT Transition for Strongly Interacting Fermi Gas”

   Rachel Sapiro (University of Michigan)
   “BEC Experiments at Michigan (Bloch Oscillation etc.)”

5:00 PM  Raymond Laflamme (University of Waterloo)
“NMR Quantum Information Processing”

6:00 PM  Talks Conclude

FRIDAY, JUNE 20TH

9:00 AM  Full Breakfast (337 West hall)

9:30 AM  Mikhail Lukin (Harvard University)
“Quantum Networking with Atomic Ensembles & Diamonds”

10:30 AM  Sankar Das Sarma (University of Maryland)
“Topological Quantum Computation and Beyond”

11:30 AM  LUNCH BREAK

1:00 PM  Raymond Laflamme (University of Waterloo)
“NMR Quantum Information Processing”

2:00 PM  David Weiss (Pennsylvania State University)
“Neutral Atom Quantum Information”
3:00 PM  Coffee Break (337 West hall)

3:30 PM  Hans Peter Büchler (University of Stuttgart)  
"Cold Polar Molecules and their Applications for Quantum Information"

4:30 PM  Week 1 Talks Conclude

-- Repeat --

CANOE TRIP, Saturday, June 21\textsuperscript{st} at 10:00am
See Welcoming Memo for further details

-- Repeat --
MONDAY, JUNE 23RD

9:00 AM Full Breakfast (337 West hall)

9:30 AM David DiVincenzo (IBM Research)
“Superconducting Qubits”

10:30 AM Luis Orozco (University of Maryland)
“Cavity QED and its Applications for Quantum Information”

11:30 AM LUNCH BREAK

1:00 PM Eric Adelberger (University of Washington)
“Test of Equivalence Principle”

2:00 PM Hans Peter Büchler (University of Stuttgart)
“Cold Polar Molecules and their Applications for Quantum Information”

3:00 PM Coffee Break (337 West hall)

3:30 PM Contributed 20 minute Talks

Xiaodong Xu (University of Michigan)
“Experiments on Spin Manipulation in Quantum Dots”

Kelly Younge (University of Michigan)
“Blockade Experiments with Rydberg Atoms”

Maxime Boissonneault (University of Sherbrooke)
“Circuit Quantum Electrodynamics: Beyond the Linear Dispersive Limit”

4:30 PM Poster Presentations and Discussions

5:30 PM Poster Session Concludes

TUESDAY, JUNE 24TH

9:00 AM Full Breakfast (337 West hall)

9:30 AM David DiVincenzo
“Superconducting Qubits”

10:30 AM Eric Cornell (University of Colorado)
“Precision Measurements”

11:30 AM LUNCH BREAK

1:00 PM Eric Adelberger (University of Washington)
“Sub-Minimeter Tests of the Gravitational Inverse-Square Law”

2:00 PM Hans Peter Büchler (University of Stuttgart)
“Cold Polar Molecules and their Applications for Quantum Information”
3:00 PM  Coffee Break (337 West hall)

3:30 PM  Lius Orozco (University of Maryland)
“Cavity QED and its Applications for Quantum Information”

4:30 PM  Poster Presentations and Discussions

5:30 PM  Poster Session Concludes

**WEDNESDAY, JUNE 25TH**

9:00 AM  Full Breakfast (337 West hall)

9:30 AM  David DiVincenzo (IBM Research)
“Superconducting Qubits”

10:30 AM  Eric Adelberger (University of Washington)
“Planck Scale Test of Lorentz Invariance with a Spin Pendulum”

11:30 AM  **LUNCH BREAK**

1:00 PM  Luis Orozco (University of Maryland)
“Cavity QED and its Applications for Quantum Information”

2:00 PM  Eric Cornell (University of Colorado)
“EDM”

3:00 PM  Coffee Break (337 West hall)

3:30 PM  Zheng-Tian Lu (University of Chicago)
“Spectroscopy of Radioactive Atoms and its Applications”

4:30 PM  Poster Presentations and Discussions

5:30 PM  Poster Session Concludes

**THURSDAY, JUNE 26TH**

9:00 AM  Full Breakfast (337 West hall)

9:30 AM  James Hartle (UCSB)
“Quantum Mechanics in the Light of Quantum Cosmology”

10:30 AM  Chris Monroe (University of Maryland)
“Quantum Networking with Trapped Ions”

11:30 AM  **LUNCH BREAK**

1:00 PM  Luis Orozco (University of Maryland)
“Parity Violation on Francium”
2:00 PM  Zheng-Tian Lu (University of Chicago)
“Spectroscopy of Radioactive Atoms and its Applications”

3:00 PM  Coffee Break (337 West hall)

3:30 PM  Contributed 20 Minute Talks

Michael Bishof (University of Chicago, Argonne National Lab)
“Observation of Allowed but Highly Suppressed Transitions in HE-3”

Tobias Kampschulte (University of Bonn, Germany)
“Measuring the Coupling Strength of Single Atoms to the Field of a High-Finesse Optical Resonator”

4:30 PM  Poster Presentations and Discussions
5:30 PM  Poster Session Concludes

FRIDAY, JUNE 27TH

9:00 AM  Full Breakfast (337 West hall)

9:30 AM  James Hartle (UCSB)
“Quantum Mechanics in the Light of Quantum Cosmology”

10:30 AM  Luis Orozco (University of Maryland)
“Parity Violation on Francium”

11:30 AM  LUNCH BREAK

1:00 PM  Zheng-Tian Lu (University of Chicago)
“Spectroscopy of Radioactive Atoms and its Applications”

2:00 PM  Chris Monroe (University of Maryland)
“Quantum Networking with Trapped Ions”

3:00 PM  Coffee Break (337 West hall)

3:30 PM  Summer School Concludes