

Quantum Computing Symposium

September 26, 2007
Room A-10, Jadwin Hall
9:00 am – 5:00 pm

9:00 – 9:10 am **Welcome, Curtis Callan & Shivaji Sondhi, Princeton U.**

9:10 – 10:00 am **Session Chair, Duncan Haldane, Princeton U.**

9:10 – 10:00 am “*Topological quantum computing with exotic fractional quantum Hall states*”
Steve Simon, Bell Labs

10:00- 10:20 am **Break**

10:20 – 12:00 pm **Session Chair, David Huse, Princeton U.**

10:20 – 11:10 am “*Superconducting qubits at IBM*”
David DiVincenzo , IBM

11:10 –12:00 am “*Topologically protected qubits based on Josephson structures: theory and experimental realization*”
Lev Ioffe, Rutgers

12:00 – 1:00 pm **Lunch**

1:00 – 2:40 pm **Session Chair, William Brinkman, Princeton U.**

1:00 – 1:50 pm “*A universal operator theoretic framework for quantum fault tolerance*”
Gerry Gilbert, The MITRE Corporation

1:50 – 2:40 pm “*Quantum Computing as Computer Science*”
Umesh Vazirani, Berkeley University

2:40 – 3:00 pm **Break**

1:30 – 3:00 pm **Session Chair, Stephen Lyon, Princeton U.**

3:00 to 3:50 pm “*Nuclear Spins in Quantum Dots and interacting 2DEGs*”
Daniel Loss, Basel Switzerland

3:50 – 4:40 pm “*Controlling quantum coherence in semiconducting nanostructures*”
Jason Petta, Princeton University