Schedule

Thursday, October 1, 2009

8-8:30   Registration
8:30-8:45 Welcoming remarks
8:45-10:00 Sam Lomonaco, University of Maryland
  *An Intuitive Overview of the Theory of Quantum Knots*
10:00-10:15 Coffee Break
10:15-11:30 Howard Brandt, Army Research Laboratory
  *Quantum Computational Curvature and Jacobi Fields*
11:30-1:00 Lunch
1:00-2:15 Paul Benioff, Argonne National Laboratory
  *A Possible Approach to Inclusion of Space and Time in Frame Fields of Quantum Representations of Real and Complex Numbers*
2:15-2:30 Break
2:30-3:45 David Radford University of Illinois, Chicago
  *Invariants of Knots and Links Arising from Finite-Dimensional Algebras*

Friday, October 2, 2009

9:00-10:15 Samson Abramsky, Oxford University Computing Laboratory
  *Representing Physical Systems as Chu Spaces*
10:15-10:30 Coffee Break
10:30-11:45 Yong Shi Wu, University of Utah
  *Entangling Power of Braiding Quantum Gates*
11:45-1:15 Lunch
1:15-2:30 Bob Coecke, Oxford University Computing Laboratory
  *Depicting non-locality*
2:30-2:45 Break
2:45-4:00 John Myer, Harvard University
  *Adventures in Entanglement*
Saturday, October 3, 2009

9:00-10:15  Robert Bonneau, Air Force Office of Scientific Research  
           *Adaptive Coherence Conditioning*

10:15-10:30  Coffee Break

10:30-11:45  Sergey Bravyi, IBM  
             *Perturbative expansions based on the Schrieffer-Wolff transformation*

11:45-1:15  Lunch

1:15-2:30  Denis Ilyutko, Moscow State University  
           *Free Knots: Parity and Cobordisms*

2:30-2:45  Break

2:45-4:00  Vladimir Korepin, Stony Brook University  
           *Spectrum of the density matrix*

4:00-4:15  Break

4:15-5:30  Louis Kauffman, University of Illinois, Chicago  
           *Topological Quantum Information Theory*

Sunday, October 4, 2009

8:00-9:15  Goong Chen, Texas A&M University  
           *A Unified Treatment for the Universality of Quantum Gates for Various Quantum Computing Gates*

9:15-9:30  Coffee Break

9:30-10:45  Eric Rowell, Texas A&M University  
           *Classifying Modular Categories*

11:00 -??  Lunch