

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