Conference and Workshop on
Coding Theory and Quantum Computing
May 20-24, 2003
University of Virginia

Workshop/Conference schedule "at-a-glance"
(Note: all talks will be in Thornton E316, which is in the Electrical and Computer Engineering building)

<table>
<tr><th>Tues, May 20</th><th>Wed, May 21</th><th>Thurs, May 22</th><th>Fri, May 23</th><th>Sat, May 24</th></tr>
<tr><td>8 am
Coffee, Donuts</td><td></td><td>8 am
Coffee, Donuts</td><td></td><td></td></tr>
<tr><td>8:30-9
Opening Remarks</td><td>8:30-9
Coffee, Donuts</td><td>8:30-9
Pfister</td><td>8:30-9
Coffee, Donuts</td><td>8:30-9
Coffee, Donuts</td></tr>
<tr><td rowspan="2">9-10:15
Lomonaco 1</td><td rowspan="2">9-10:15
Lomonaco 3</td><td rowspan="2">9:15-10:30
Lomonaco 4</td><td>9-10
Gao</td><td>9-10
van der Wal</td></tr>
<tr><td>10:30-11:45
Lomonaco 2</td><td>10:30-11:45
Calderbank 2</td><td>10:45-12
Meyer 3</td><td>10:15-11:15
van Enk</td><td>10:15-11:15
Xiang</td></tr>
<tr><td>Lunch</td><td>Lunch</td><td>Lunch</td><td>Lunch</td><td>Lunch</td></tr>
<tr><td>1:30-2:45
Calderbank 1</td><td>1:30-2:45
Meyer 2</td><td>12:30-1:30
"Problem Session"</td><td>1-2
Terhal</td><td>1-2
Matthews</td></tr>
<tr><td rowspan="2">3:15-4:30
Meyer 1</td><td rowspan="2">3:15-4:30
Calderbank 3</td><td rowspan="2">Free Time</td><td>2:15-3:15
Viola</td><td rowspan="2">2:15-3:45
Contributed Talks</td></tr>
<tr><td>3:45-4:45
Hillery</td></tr>
<tr><td></td><td></td><td></td><td>5:30-6:30
Reception</td><td></td></tr>
<tr><td></td><td></td><td></td><td>6:30
Dinner</td><td></td></tr>
</table>

Workshop/Conference schedule details:

Tuesday, May 20

8-8:30 a.m. Coffee and donuts

8:30-9 a.m. Opening Remarks

9-10:15 a.m. Samuel Lomonaco, Jr. (Computer Science and Electrical Engineering, University of Maryland, Baltimore County)

A Rosetta Stone for Quantum Computation

10:30-11:45 a.m. Samuel Lomonaco, Jr.

Grover's and Shor's Quantum Algorithms, and beyond

11:45 a.m. - 1:30 p.m. Lunch break

1:30-2:45 p.m. Robert Calderbank (AT&T Labs Research)

3:15-4:30 p.m. David Meyer (Department of Mathematics, University of California, San Diego)

Wednesday, May 21

8:30-9 a.m. Coffee and donuts

9-10:15 a.m. Samuel Lomonaco, Jr.

Quantum Hidden Subgroup Algorithms with Applications to Continuous Quantum Computation

10:30-11:45 a.m. Robert Calderbank
11:45 a.m. - 1:30 p.m. Lunch break
1:30-2:45 p.m. David Meyer
3:15-4:30 p.m. Robert Calderbank

Thursday, May 22
8-8:30 a.m. Coffee and donuts
8:30-9 a.m. Contributed Talk
Olivier Pfister (Department of Physics, University of Virginia)
9:15-10:30 a.m. Samuel Lomonaco, Jr.
Quantum Entanglement and Knot Theory
10:45 a.m. - 12 p.m. David Meyer
12-12:30 p.m. Lunch break (sandwiches provided)
12:30-1:30 p.m. "Problem Session" A general discussion of the research fields, for use in the preparation of a "white paper" for the NSF.
Free afternoon

Friday, May 23
8:30-9 a.m. Coffee and donuts
9-10 a.m. Shuhong Gao (Department of Mathematical Sciences, Clemson University)
Grobner bases, rational approximation, and decoding of AG codes
10:15-11:15 a.m. Steven van Enk (Bell Labs)
Entangled coherent states
11:15 a.m. - 1 p.m. Lunch break
1-2 p.m. Barbara Terhal (IBM Watson Research Center)
Locking classical correlations in quantum states
2:15-3:15 p.m. Lorenza Viola (Los Alamos National Laboratory)
Quantum entanglement beyond subsystems
3:45-4:45 p.m. Mark Hillery (Department of Physics, Hunter College of CUNY)
Quantum walks
5:30-6:30 p.m. Reception
6:30-? Dinner

Saturday, May 24
8:30-9 a.m. Coffee and donuts
9-10 a.m. Caspar H. van der Wal (Department of Physics, Harvard University and Harvard-Smithsonian Center for Astrophysics)
Progress in experimental realizations of quantum information systems: light storage in atomic vapors and superconducting qubit circuits
10:15-11:15 a.m. Qing Xiang (Department of Mathematical Sciences, University of Delaware)
11:15 a.m. - 1 p.m. Lunch break
1-2 p.m. Gretchen Matthews (Department of Mathematical Sciences, Clemson University)
2:15-3:45 p.m. Contributed Talks
Jon-Lark Kim (Dept of Mathematics and Statistics, University of Nebraska-Lincoln)
Nonbinary quantum stabilizer codes from algebraic curves
Anocha Yimsiriwattana (Computer Science and Electrical Engineering, University of Maryland, Baltimore County)
General GHZ State and Distributed Quantum Computing
Sabre Kais (Department of Chemistry, Purdue University)
Tuning the entanglement for magnetic systems
Manish Gupta (Arizona State University)
Coding theory, biology and quantum computers