



Summary of ISTeC Activities ISTeC Distinguished Lectures

- [ISTeC Sponsored Workshops at CSU](#)
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 - Tasks for the CSU Administration
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ISTeC Distinguished Lecturers give two presentations at CSU. One is a talk suitable for a general audience interested in information science and technology (which is the ISTeC Distinguished Lecture), and one is suitable for an audience in the speaker's particular field of information science and technology. In addition, the ISTeC Distinguished Lecturer may spend up to a week at CSU to interact with our faculty and students. ([Guidelines for proposing ISTeC Distinguished lecturer](#))

Fall 2001:

Speaker: Prof. Vincent Poor, Princeton University
Host: Louis Scharf, Electrical and Computer Engineering/Statistics
Distinguished Lecture:
Title: "The Wireless Revolution: A Signal Processing Perspective"
Date: December 5, 2001, attendance: about 80
Second Lecture:
Title: "Coherent Space-Time Receivers for Wireless Communication"
Date: December 6, 2001, attendance: about 30

Spring 2002:

Speaker: Prof. Jack Dongarra, University of Tennessee
Host: H. J. Siegel, Electrical and Computer Engineering/Computer Science
Distinguished Lecture:
Title: ["An Overview and Trends in High Performance Computing"](#)
Date: May 2, 2002, attendance: about 60
Second Lecture:
Title: ["Three Tools to help with Cluster and Grid Computing: ATLAS, PAPI, and Netsolve."](#)
Date: May 2, 2002, attendance: about 30

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Fall 2002:

Speaker: [Prof. Eugene Spafford, Purdue University](#)

Hosts: Sudipto Ghosh and Indrajit Ray, Computer Science

Distinguished Lecture:

Title: [“Myths, Fads, and False Economies: How NOT to get Secure Systems”](#)

Date: November 4, 2002, attendance: about 100

Second Lecture:

Title: [“ESP and Poly2: Challenging the Conventional Wisdom”](#)

Date: November 4, 2002, attendance: about 100

Spring 2003:

[Prof. Alfred Hero, University of Michigan.](#)

Host: Louis Scharf, Electrical and Computer Engineering/Statistics

Distinguished Lecture:

Title: [“Data Mining for Genomics”](#)

Date: February 24, 2003, attendance: about 50

Second Lecture:

Title: [“Space-Time Coding for Wireless Communication”](#)

Date: February 25, 2003, attendance: about 40

Fall 2003:

Speaker: [Professor David Haussler, University of California at Santa Cruz.](#)

Hosts: Darrell Whitley and Ross McConnell, Computer Science.

Distinguished Lecture:

Title: [“The UCSC Human Genome Browser.”](#)

Date: November 14, 2003, attendance: about 125

Second Lecture:

Title: [“Comparing the Human, Mouse and Rat Genomes.”](#)

Date: November 14, 2003, attendance: about 150

Fall 2003:

Speaker: [Professor Jim Kurose, University of Massachusetts at Amherst.](#)

Host: Anura Jayasumana, Electrical and Computer Engineering/Computer Science.

Distinguished Lecture:

Title: [“Networking Successes, New Challenges, and an Expanding Waist as the Field Approaches 40”](#)

Date: December 4, 2003, attendance: about 50

Second Lecture:

Title: [“Network-based Matchmaking in Distributed Publish/subscribe Systems”](#)

Date: December 5, 2003, attendance: about 40

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Spring 2004:

Speaker: [Professor Arnold L. Rosenberg, University of Massachusetts at Amherst.](#)

Host: H. J. Siegel, Electrical and Computer Engineering/Computer Science.

Distinguished Lecture:

Title: [“N+1 Heads Are Better Than N -- or Are They?”](#)

Date: January 23, 2004, attendance: about 30

Second Lecture:

Title: [“How to Share a Bag of Tasks Optimally in a Heterogeneous Cluster -- Three Models, Three Answers.”](#)

Date: January 22, 2004, attendance: about 40

Spring 2004:

Speaker: [Prof. Jim Hendler, University of Maryland.](#)

Host: Adele Howe, Computer Science

Distinguished Lecture:

Title: [“The Semantic Web -- Bringing Meaning to the World Wide Web”](#)

Date: February 9, 2004, attendance: about 140

Second Lecture:

Title: [“Dynamic Service Choreography on the Semantic Web.”](#)

Date: February 9, 2004, attendance: about 70

Spring 2004:

Speaker: [Dr. Emmit Leith, University of Michigan](#)

Host: Randy Bartels, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Making the Invisible Visible with Holographic Information Processing”](#)

Date: May 4, 2004, attendance: about 60

Second Lecture:

Title: [“Holography, Synthetic Apertures, Optical Sectioning, and Photon Migration: Cross-Fertilizations”](#)

Date: May 5, 2004, attendance: about 50

Fall 2004:

Speaker: [Dr. Robert Corn, Chemistry, University of California, Irvine](#)

Host: Nancy Levinger, Chemistry

Distinguished Lecture:

Title: [“DNA Computing at Surfaces: Programmable DNA Assemblies”](#)

Date: November 11, 2004, attendance: about 100

Second Lecture:

Title: [“Enzymatic Methods for SPR Biosensors: A Combination of Langmuir and Michaelis-Menten Kinetics”](#)

Date: November 11, 2004, attendance: about 40

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Spring 2005:

Speaker: Dr. Joan Mitchell, IBM Fellow

Host: Dr. Pete Seel, Journalism and Technical Communication

Distinguished Lecture:

Title: [“A Cultural History of the Original JPEG Standard”](#)

Date: Monday, March 7, 2005, attendance: about 70

Second Lecture:

Title: [“What's Being Added to JPEG-1?”](#)

Date: Monday, March 7, 2005, attendance: about 10

Spring 2005:

Speaker: [Dr. Wolfgang Gentzsch](#), MCNC Grid Computing and Network Services

Host: Dr. Michael De Miranda, School of Education

Distinguished Lecture/CS BMAC Lecture:

Title: [“Grid Computing, the Next Big Thing?”](#)

Date: Monday, March 21, 2005, attendance: about 60

Second Lecture:

Title: [“A Grid Software Stack”](#)

Date: Tuesday, March 22, 2005, attendance: about 20

Spring 2005:

Speaker: Dr. Henryk Temkin, Electrical and Computer Engineering, Texas Tech University

Host: Dr. Carmen Menoni, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Light Emitting Diodes Based On Nitride Semiconductors – From Red To Ultraviolet”](#)

Thursday, March 24, 2005, attendance: about 70

Second Lecture:

Title: [“Waveguide Optics and MEMS - From Wavelength Division Multiplexing to Generation of THz bursts”](#)

Date: Friday, March 25, 2005, attendance: about 30

Spring 2005:

Speaker: Dr. Yale Patt, Electrical and Computer Engineering, University of Texas at Austin

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Education. Are there any questions?”](#)

Date: Tuesday, April 12, 2005

attendance: about 40

Second Lecture:

Title: [“The Microprocessor in the Year 2015: Issues, Challenges, Potential Avenues to Solutions”](#)

Monday, April 11, 2005

attendance: about 140

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Fall 2005:

Speaker: [Dr. Nick Tredennick](#), Editor, *The Gilder Technology Report*

Host: Dr. Sanjay Rajopadhye, Computer Science

Distinguished Lecture:

Title: "[Semiconductor Trends 2005](#)"

Thursday, September 8, 2005, attendance: about 51

Second Lecture:

Title: "[Moore Myths](#)"

Friday, September 9, 2005, attendance: about 54

[Spring 2006 Semester Poster](#)

Spring 2006

Speaker: [Dr. Edward Delp](#), Electrical and Computer Engineering, Purdue University

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "[Are You Stealing Content? Multimedia Security: The Good, The Bad, and The Ugly: We are Going to Catch You!](#)"

Date: Friday, March 24, 2006, attendance: about

Second Lecture:

Title: "[Network-Driven Wyner-Ziv Video Coding Using Forward Prediction](#)"

Date: Friday, March 24, 2006, attendance:

Spring 2006

Speaker: [Dr. José Fortes](#), Electrical and Computer Engineering and Computer and Information Science and Engineering University of Florida

Host: Dr. Sanjay Rajopadhye, Computer Science

Distinguished Lecture:

Title: "[Computing Grids: Virtually Yours and At Your Service](#)"

Date: Friday, March 31, 2006, attendance: about 215

Second Lecture:

Title: "[Towards Autonomic Virtual Applications and Systems](#)"

Date: Friday, March 31, 2006, attendance: about 20

Spring 2006

Speaker: [Dr. Herschel A. Rabitz](#) Professor, Department of Chemistry, Princeton University

Host: Dr. Randy Bartels, Electrical and Computer Engineering

Distinguished Lecture:

Title: "[Controlling Quantum Phenomena: The Dream Is Alive](#)"

Date: Thursday, April 27, 2006, attendance: about 70

Second Lecture:

Title: "[An Open Forum on Controlling Quantum Phenomena: Why do the Experiments Appear 'Easy' and What May Lie Ahead?](#)"

Date: Friday, April 28, 2006, attendance: about 20

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Spring 2006

Dr. James Hack, Senior Scientist and Head, Climate Modeling Section, Deputy Director, Climate and Global Dynamics Division, National Center for Atmospheric Research (NCAR)

Host: Dr. Pat Burns, ACNS

Distinguished Lecture:

Title: [“The Earth Simulator: A Retrospective on the Background, Science Opportunities, and Risks”](#)

Monday, May 1, 2006, attendance: about 55

Second Lecture:

Title: [“Business Technology Management: Research Synthesis and Future Directions”](#)

Monday, May 1, 2006, attendance: about 45

Spring 2006

[Dr. Robert W. Zmud](#), Professor and Michael F. Price Chair in Management Information Systems, Michael F. Price College of Business, University of Oklahoma

Host: Dr. Stephen Haynes, Computer Information Systems

Distinguished Lecture:

Title: [“Business Technology Management: Research Synthesis and Future Directions”](#)

Friday, May 5, 2006, attendance: about 30

Second Lecture:

Title: [“The Identity Crisis with the Information Science Discipline: Implications for Publishing Strategies”](#)

Friday, May 5, 2006, attendance: about 20

[Fall 2006 Semester Poster](#)

Fall 2006

Dr. Rochit Rajsuman, Chief Scientist, Advantest America Corporation

Host: Dr. Anura Jayasumana, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“State of Semiconductor Industry: Business and Technical Perspective”](#)

Tuesday, August 29, 2006, attendance: about 35

Second Lecture:

Title: [“Industrial Research in Semiconductor Test”](#)

Tuesday, August 29, 2006, attendance: about 120

Fall 2006

Dr. Viktor Prasanna, Professor, Department of Electrical Engineering and Department of Computer Science University of Southern California

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Reconfigurable Computing: Opportunities and Challenges”](#)

Monday, September 25, 2006, attendance: about 80

Second Lecture:

Title: [“Design of Linear Algebra Library for Reconfigurable Systems”](#)

Tuesday, September 26, 2006, attendance: about 25

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Fall 2006

Dr. Jean-Luc Gaudiot, Professor & Chair, Department of Electrical Engineering and Computer Science

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“The Walls of Computer Design”](#)

Monday, October 9, 2006, attendance: about 60

Second Lecture:

Title: [“Design and Effectiveness of Small Decoupled Dispatch Queues”](#)

Tuesday, October 10, 2006, attendance: about 15

Fall 2006

Dr. Mikhail Atallah, Distinguished Professor of Computer Science, Department of Computer Science, Purdue University

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Security Issues in Collaborative Computing”](#)

Monday, October 30, 2006, attendance: about 65

Second Lecture:

Title: [“Privacy-Preserving Trust Negotiations”](#)

Tuesday, October 31, 2006, attendance:

Fall 2006

Dr. Michael Goodchild, Professor of Geography, University of California, Santa Barbara

Host: Dr. Denis Dean, Forest, Rangeland and Watershed Stewardship

Distinguished Lecture:

Title: [“The Spatial Web: Visions For A Geographically Enabled World”](#)

Date: Monday, December 4, 2006, attendance: about 75

Second Lecture:

Title: [“The Fundamental Laws Of Geographic Information Science”](#)

Friday, December 1, 2006, attendance: about 20

[Spring 2007 Semester Poster](#)

Spring 2007

Dr. Martin Gruebele, Director of the Center for Biophysics and Computational Biology, University of Illinois

Host: Dr. Nancy Levinger, Department of Chemistry

Distinguished Lecture:

Title: [“Quantum Computing with Molecules”](#)

Thursday, January 25, 2007, attendance: about 98

Second Lecture

Title: [“Single Molecule Absorption Spectroscopy”](#)

Friday, January 26, 2007, attendance: about 40

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Spring 2007

Dr. Andrew Weiner, Scifres Distinguished Professor of Electrical and Computer Engineering, School of Electrical and Computer Engineering, Purdue University

Host: Dr. Carmen Menoni, Department of Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Ultrafast Parallel Optical Signal Processing”](#)

Monday, February 5, 2007, attendance: about 65

Second Lecture

Title: [“Optical Pulse Shaping at Hyperfine Spectral Resolution”](#)

Tuesday, February 6, 2007, attendance:

Spring 2007

Dr. Jianqing Fan, Frederick L. Moore Professor of Finance, Director of Committee of Statistical Studies, Princeton University

Host: Dr. Haonan Wang, Department of Statistics

Distinguished Lecture:

Title: [“High Dimensional Statistical Learning and Inference”](#)

Wednesday, April 11, 2007, attendance:

Second Lecture

Title: [“Statistical Analysis of DNA Microarray Data”](#)

Thursday, April 12, 2007, attendance:

Spring 2007

Dr. Avinash Kak, Professor of Electrical and Computer Engineering, Purdue University

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Why Robots Will Never Have Sex”](#)

Monday, April 23, 2007, attendance: about 75

Second Lecture

Title: [“Camera Sensor Networks”](#)

Monday, April 23, 2007, attendance:

[Fall 2007 Semester Poster](#)

Fall 2007

[Steve Leibson](#), Technology Evangelist, Tenselica Inc.

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Challenges for Consumer Electronics in the 21st Century”](#)

October 1, 2007, attendance: about 66

Second Lecture:

Title: [“Everything You Know About Microprocessors and Systems Design is Wrong for SOC Design”](#)

October 2, 2007, attendance: about 35

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Fall 2007

[Dr. Don Towsley](#) Distinguished Professor, Department of Computer Science, University of Massachusetts – Amherst

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“The Internet is Flat: A Brief History of Networking in the Next Ten Years”](#) 

October 22, 2007, attendance about 75

Second Lecture:

Title: “Multipath Routing, Congestion Control and Dynamic Load Balancing”

October 23, 2007, attendance about 25

Fall 2007

[José E. Moreira](#), Chief Architect, Commercial Scale Out IBM Thomas J. Watson Research Center

Host: Dr. H.J. Siegel, Electrical and Computer Engineering, Chief Architect, Commercial Scale Out, IBM Thomas J. Watson Research Center

Distinguished Lecture:

Title: [“Scale-up and Scale-out: Evolution and Trends in Parallel Processing”](#) 

October 29, 2007, attendance about 75

Second Lecture:

Title: “Delivering Teraflops: An Account of How Blue Gene was Brought to Life”

October 30, 2007, attendance about 25

Fall 2007

[Mike Flynn](#), Senior Adviser, Maxeler Corp. and Professor Emeritus, Stanford University

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: “Super SOC: Putting the Whole System on the Chip”

November 12, 2007, attendance about 55

Second Lecture:

Title: “The Future is Parallel but it May Not be Easy”

November 13, 2007, attendance about

[Spring 2008 Semester Poster](#)

Spring 2008

[Dr. Anthony Ephremides](#), Cynthia Kim Professor of Information Technology, University of Maryland

Host: Dr. Rockey Luo, Electrical and Computer Engineering

Distinguished Lecture:

Title: “Network Coding: A New Paradigm for Networking?”

January 28, 2008, attendance about

Second Lecture:

Title: “Cooperative Techniques At The Network Level”

Tuesday, January 29 2008, attendance about

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Spring 2008

[Dr. T.W. \(Tom\) Williams](#), Synopsys Fellow, [Synopsys, Inc.](#)

Host: Dr. Anthony Maciejewski, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Electronic Design Automation \(EDA\) to the Rescue of the Silicon Roadmap”](#) 

March 24, 2008, attendance about

Second Lecture:

Title: “Quality Now Requires Small Delay Fault Model”

Tuesday, March 25, 2008, attendance about

Spring 2008

[Dr. Radia Perlman](#), Sun Fellow, Sun Microsystems

Host: Dr. Indrajit Ray, Computer Science

Distinguished Lecture:

Title: “Myths, Missteps, and Folklore of Network Protocol Design”

March 25, 2008, attendance about

Second Lecture:

Title: “Data: Making It Be There When You Want It and Go Away When You Want It Gone”

Monday, March 24, 2008, attendance about

Spring 2008

[Dr. Fran Berman](#), Director, San Diego Supercomputer Center

Professor and HPC Endowed Chair, University of California San Diego

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“100 Years of Digital Data”](#) 

March 31, 2008, attendance about 60

Second Lecture:

Title: “Cyberinfrastructure Challenges in Computer Science”

Monday, March 31, 2008, attendance about 20

Spring 2008

[Dr. André van Tilborg](#), Deputy Under Secretary of Defense for Science and Technology, Office of the Secretary of Defense

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: [“Future Directions in DoD Science and Technology”](#) 

April 7, 2008, attendance about 100

[Fall 2008 Semester Poster](#)

Fall 2008

[Dr. Chris Greer, NSF](#)

Host: Dawn Bastian, Library 

Distinguished Lecture:

Title: [“Developing a Shared Vision for the Future of Networking and Information Technology Research and Development”](#)

Monday, Sept 22, 2008, attendance about 50

Fall 2008

[David Goldberg, University of Illinois at Urbana Champagne](#)

Host: Darrell Whitley, Computer Science

Distinguished Lecture:

Title: [“The Creativity Imperative and the Technology Professional of the Future”](#) 

Friday, Oct 3, 2008, attendance about 45

Second Lecture

Title: “Not Your Grandmother’s Genetic Algorithm”

Fall 2008

[Qing Nie, UC Irvine](#)

Host: James Liu, Math

Distinguished Lecture:

Title: “Systems Biology: A Frontier of Computational Science” 

Monday, November 17, 2008

Second Lecture:

Title: “Computational Analysis for Morphogens”

Monday, November 17, 2008

Fall 2008

[Vivek Sarkar, Rice University](#)

Host: Michelle Strout, computer Science

Distinguished Lecture:

Title: [“Multicore Programming Models and their Implementation Challenges”](#) 

Monday, December 8, 2008

Second Lecture:

Title: “A Quick Tour of Modern Multicore Programming Models”

Tuesday, December 9, 2008

[Spring 2009 Semester Poster](#)

Spring 2009

[Dr. Jose Millan](#), Swiss Federal Institute of Technology Lausanne

Host: Chuck Anderson (CS)

Distinguished Lecture:

Title: ["Non-Invasive Brain-Controlled Robots"](#) 

February 9, 2009, attendance about 100

Second Lecture:

Title: “A Look Behind our Adaptive Brain Interface's Veil”

February 9, 2009

Molecular, Cellular and Integrative Neurosciences Lecture:

“Cognitive Signals for Brain-Computer Interaction”

February 11, 2009

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Spring 2009

[Dr. Stan Wagon](#), Macalester College

Host: Ross McConnell (CS)

Distinguished Lecture:

Title: ["Impossible, Unbelievable ...but True Results of Mathematics and Physics"](#)

February 23, 2009, attendance about 100



Second Lecture:

Title: "Extreme Computing: The SIAM 100-Digit Challenge"

Monday, February 23, 2009

Spring 2009

[Dr. Craig Stunkel](#), IBM Watson Research Center

Host: H.J. Siegel (ECE)

Distinguished Lecture:

Title: ["Toward Exascale Computing"](#)



March 23, 2009, attendance about 55

Second Lecture:

Title: "High Performance Computing: Heterogeneous Nodes and Hybrid Systems"

Tuesday, March 24, 2009, attendance about 20

Spring 2009

[Dr. Dan Reed](#), Scalable and Multicore Computing Strategist, Microsoft Corp

Host: H.J. Siegel (ECE)

Distinguished Lecture:

Title: ["The Computing Revolution"](#)

April 13, 2009, attendance about 110

Second Lecture:

Title: "ManyCore, Clouds, Research and the Future"

Monday, April 13, 2009, attendance about 70

Spring 2009

[Dr. Ophir Frieder](#), Illinois Institute of Technology

Host: H.J. Siegel (ECE)

Distinguished Lecture:

Title: ["Searching in the 'Real World'"](#)



April 20, 2009

Second Lecture:

Title: "Information Retrieval Technology in Peer-to-Peer Search"

Tuesday, April 21, 2009

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[Fall 2009 Semester Poster](#)

[Norm Augustine](#), Lockheed Martin Corporation, Retired Chairman and CEO

Host: H.J. Siegel (ECE)

Distinguished Lecture:

Title: [“The Rise and Fall of Systems Engineering”](#)

September 28, 2009, attendance about 125

Second Lecture:

Title: “The Expanding Role of Education in America’s Competitiveness”

September 28, 2009, attendance about 80

[Franco Cerrina](#), Boston University, Professor and Department Head, Electrical and Computer Engineering

Host: Mario Marconi (ECE)

Title: [“Photons at Work: From Silicon to DNA and Back”](#)



October 5, 2009, attendance about 90

Second Lecture:

Title: “Patterning at the Nanoscale: Extreme Ultraviolet Lithography”

Tuesday, October 6, 2009, attendance about

[Jeannette M. Wing](#), NSF Assistant Director; Carnegie Mellon University, President's Professor of Computer Science

Host: Robert France (CS)

Title: [“Computational Thinking and Thinking About Computing”](#)



October 21, 2009, attendance about 70

[Matt MacLaurin](#), Microsoft Research, Principal Program Manager Creative Systems Team

Host: H.J. Siegel (ECE)

Distinguished Lecture:

Title: [“Kodu - End-user Programming and Design for Games”](#)



November 2, 2009, attendance about 65

Second Lecture:

Title: “Designing and Building Kodu: a Graphics, Simulation, and Design Tool for Children”

November 2, 2009, attendance about 35

Robert Calderbank, Princeton University, Professor of Electrical Engineering, Retired AT&T Vice President for Research

Host: Ali Pezeshki

Distinguished Lecture:

Title: “Quantum Computing and Cellular Phones”

November 30, 2009

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