

CURRICULUM VITAE: *Lawrence M. Krauss*

Born: May 27, 1954; New York City

Citizenship: U.S.A., Canada

Married: 1980-2012 to Katherine Kelley
2014- to Nancy Dahl

Children: Lillian, born Nov. 23, 1984
Santal (step-daughter), born Aug. 14, 2000

Current Address and Position: Foundation Professor, Director, Origins Project
Co-Director, Cosmology Initiative
School of Earth and Space Exploration and
Department of Physics
Arizona State University
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Education

B.Sc. First Class Honours, Mathematics and Physics
Carleton University, Ottawa, Canada, 1977

Ph.D. Physics, Massachusetts Institute of Technology,
Cambridge, Massachusetts, 1982

Honorary Degrees and Fellowships:

1998 Fellow, American Physical Society

2001 Fellow, American Association for the Advancement
of Science

2003 D.Sc. Carleton University, Ottawa, Canada

Employment: Teaching and Research (since 1982)

1982-85 Junior Fellow, Harvard Society of Fellows, and
Physics Dept., Harvard University

1985-88 Assistant Professor, Dept. of Physics, Yale
University

1985-86 Visiting Scientist, Boston University

1985-89 Visiting Scientist, Harvard-Smithsonian Center for
Astrophysics

1986-88 Assistant Professor, Department of Physics and
Astronomy, Yale University

1988-93 Associate Professor, Departments of Physics and
Astronomy, Yale University

1993- 2008 Ambrose Swasey Professor of Physics and
Astronomy and chair (thru 2005), Dept. of Physics,
Case Western Reserve University

2005 Director, Office of Science, Public Policy, and Bio-
Entrepreneurship, Case Western Reserve University
School of Medicine

2002-2008 Director, Center for Education and Research in
Cosmology and Astrophysics

2006-7
2008- Visiting Professor, Vanderbilt University
Foundation Professor, School of Earth and Space
Exploration & Physics Dept. and Director, Origins
Project, Arizona State University

2010- Distinguished Visiting Professor, Research School
of Astronomy and Astrophysics, Australia National
University

Visiting Positions:

CERN associate- 1983
Institute for Theoretical Physics Santa Barbara-
1984, 1985, 1988, 1989,1992, 2002,2003
Smithsonian Astrophysical Observatory- 1984-88
University of Chicago, 1989
Institute for Nuclear Theory, Seattle 1994
Institute for Nuclear and Particle Astrophysics,
Lawrence Berkeley Laboratory 1995, 1996, 1998
Scientific Associate, CERN 1996-97
Institute des Hautes Etudes Scientifique 1997-98
Isaac Newton Institute, Cambridge University 1999
Perimeter Institute 2003
Hooker Distinguished Visiting Professor, Origins
Institute, McMaster University, 2005
Member, Institute for Advanced Study, 2005
Visiting Professor, Vanderbilt University, 2006-7
Visiting Professor, University of Zurich, 2008,2009
Distinguished Visiting Professor, Mt. Stromlo
Observatory, Australian National University, 2010-
James and Jean Davis Prestige Visiting Fellow,
Otago University, 2011
Miegunyah Distinguished Visiting Fellowship,
University of Melbourne, 2011.

Other Positions:

Commentator: Marketplace, All Things Considered
2005-2008
Columnist, Nature Physics, 2005-6
Columnist, New Scientist Magazine, 2007-8
Columnist, Scientific American, 2009-10
Columnist, Slate Magazine 2012-

Chair, APS Forum on Physics and Society 2007
 Chair, AAAS Physics Section 2007
 APS Panel on Public Affairs, 2009-12
 Chair, Board of Sponsors, The Bulletin of the Atomic Scientists, 2009-
 Board of Directors, Federation of American Scientists 2010-
 Board of Directors of Center for Inquiry 2012-
 Physics Editorial Board for the College Access Project 2012-
 Executive Committee, APS Forum on Physics and Society 2012-15
 Chair, Board of Governors, Australia New Zealand Institute of Theoretical Physics, 2012-2013

Major Awards:

1984	First Prize Award, Gravity Research Foundation
1986	Presidential Young Investigator Award
1997	Glover Award for Distinction in Physics Achievement and Physics Education, Dickenson College, PA.
2000	Award for Public Understanding of Science and Technology, American Association for the Advancement of Science. Citation: <i>For global impact as a science communicator and the ability to maintain an active science career while writing several books about physics for the general public.</i>
2001	Julius Edgar Lilienfeld Prize, American Physical Society. Citation: <i>For outstanding contributions to the understanding of the early universe, and extraordinary achievement in communicating the essence of physical science to the general public.</i>
2001	Andrew R. Gemant Award, American Institute of Physics. Citation: <i>To Professor Lawrence Krauss for excellence in the interpretation of physics to the public through numerous newspaper and magazine articles, books, lectures, and television productions. Krauss is especially commended for his communication of sound scientific literacy through timely opinion pieces and books, and for his efforts to address incorrect popular interpretations of science disseminated in the mass media.</i>
2002	American Institute of Physics Science Writing Award for <i>Atom, An Odyssey from the Big Bang to Life on Earth and Beyond</i>
2003	Humanism Award, Free Inquirers of Northeast Ohio
2004	Oersted Medal, American Association of Physics Teachers.

2004	Northern Ohio Live Award of Achievement: Science and Technology
2005	Joseph A. Burton Forum Award, American Physical Society, Citation: <i>For major contributions in defending science in the schools through his efforts in combating the opponents of teaching evolution, and for continuing to enhance the public understanding of contemporary physics</i>
2009	Center for Inquiry World Congress Award for Scholarship in the Public Interest.
2009	Friend of Darwin Award, <i>National Center for Science Education</i>
2009	Helen Sawyer Hogg Prize of the Royal Astronomical Society of Canada and the Astronomical Society of Canada
2012	National Science Board 2012 Public Service Award
2013	Roma Award Urbs Universalis
2014	Academia Film Olomouc award for Outstanding Communication of Science
2014	Gravity Research Foundation Essay Award
2015	American Humanist Association's Humanist of the Year
2016	Richard Dawkins Award
2016	Freedom From Religion's "Emperor Has No Clothes Award"

Other Honors (since 1977):

1977	Senate Graduating Medal- Carleton University
1977-1981	N.R.C. Postgraduate Scholarship
1982-1985	Junior Fellow, Harvard Society of Fellows
1982-83	N.S.E.R.C. Fellowship
1988	Junior Faculty Fellowship, Yale University
1988	Senior Faculty Fellowship, Yale University
1988	Nesbitt Lecturer, Carleton University
1989	Gravity Research Foundation Prize Award
1990	Named Sigma-Xi National Lecturer (1991-92)
1990	Named to "International Leaders in Achievement"
1991	Gravity Research Foundation Prize Award
1993	Named to Ambrose Swasey Chair in Physics
1995	Gravity Research Foundation Prize Award
1996	Inaugural Distinguish Scientist Lecturer for Young People--Ohio Aerospace Institute
1996	Inaugural Distinguished Physics Lecturer, University of Minnesota
1996	Ohio Achievement Award Selection, Northern Ohio Live Magazine

1997 Hays Lecturer, Oberlin College
 1997 Great Poets League of Cleveland Honoree 1997
 1998 Cleveland Magazine, 50 Most Interesting People of
 the Year Award
 1997-8 University School-Seelbach Visiting Chair
 1998 American Physical Society Centennial Lecturer
 1998 Henry Steel Lecturer, Mid America Orthopedic
 Assn.
 1998 Commencement Speaker, Hiram College
 1998 13th Annual Frank G. and Jean M. Chesley
 Lectureship, Carleton College
 1998 Herzfeld Lecturer, Catholic University
 1999 Fellow, American Physical Society
 1999- Board of Directors, Physics Entrepreneurship
 Program.
 1999 Gravity Research Foundation Prize Award
 1999 Moti Lal Rustgi Memorial Lecturer, SUNY Buffalo
 1999 Hendrik de Waard Foundation Lecturer, Groningen,
 Netherlands
 2000 Maurer Memorial Lecturer, University of Arkansas
 2000 Vanden Miles Lecturer, Wayne State University
 2000 Kallen Lecturer, University of Lund, Sweden.
 2000 Benedum Lecturer, University of West Virginia
 2000 Great Minds Lecturer, Illinois Math and Science
 Academy, Aurora IL
 2000 Soloist, Holst, The Planets, with The Cleveland
 Orchestra
 2001 Rochester Lecturer, University of Durham, UK
 2001 Isaac Asimov Memorial Panelist, American
 Museum of Natural History, NY
 2001 Rorschach Lecturer, Rice University
 2001 Shell Lecturer, National Assoc. of Science Teachers
 2001 Invited Witness, U.S. House Committee on Science,
 Session on the Future of Space Exploration
 2001 Malstrom Lecturer, Hamline University, Minnesota
 2001 Morgan Lecturer, Texas Christian University, Fort
 Worth Texas
 2001 Timothy J. OLeary Distinguished Scientist
 Lecturer, Gonzaga University
 2001 Presidential Inauguration Keynote Speaker Clark
 University
 2001 Campbell Lecturer, Society of Pediatric Urology
 2001 Ernest Orlando Lawrence Centenary Lecturer,
 Lawrence Berkeley Laboratory
 2001 Fermi Centennial Lecturer, Fermilab
 2001 Fellow, American Association for the Advancement
 of Science
 2002 Knight Fellow, Western Reserve Academy
 2002 Friedman Lecturer, Penn State University

2002 Milton Lecturer, Syracuse University

2002 Chancellor's Lecturer, Vanderbilt University

2002 Fellow, Committee for the Scientific Investigation of Claims of the Paranormal

2003 Waynick Lecturer, Penn State University

2003 Donald Ross Hamilton Lecturer, Princeton University

2003 Woods Lecturer, Westminster College, PA

2003 New Frontiers in Information Sciences Distinguished Lecturer, Air Force Research Laboratory, Rome NY

2003 Commencement Speaker, Carleton University

2003 Five Colleges Lecturer, U Mass. Amherst

2003 William Mahoney Lecturer, U. Mass Amherst

2003 Presidential Lecturer, Clark University

2004 Joe Barnhart Lecturer, Coastal Bend College, TX

2004 Constance Wilson Distinguished Lecturer, Berry College, GA

2004 Maurice and Yetta Glicksman Commencement Lecturer, Brown University

2004 Likover Lecturer, American Civil Liberties Union.

2004 Samuel Newton Taylor Lecturer, Goucher College

2005 Hooker Professor and Lecturer, McMaster University

2005 Rudin Distinguished Scholar Lecturer, Marymount College

2005 First Annual Mel Oakes Distinguished Undergraduate Lecturer, UT. Austin

2005 World Year of Physics Lecturer, Oak Ridge National Laboratory

2005 Benson Lecturer, Miami University

2005 IBM Yorktown Heights Visions Lecturer

2005 NASA Huntsville, World Year of Physics Lecturer

2005 Sigma Pi Sigma Lecturer, Wright State University

2005 Crump Lecturer, St. Andrews School

2005 Presidential Lecturer, University of Tulsa

2005 IBM Lecturer, Wittenberg University

2005 World Year of Physics Lecturer, Severance Hall

2006 Michigan State Science Teacher's Distinguished Lecturer

2007-8 Phi Beta Kappa National Visiting Scholar

2006- Board of Sponsors, Bulletin of the Atomic Scientists

2006 Terry Lectureship, Science and Religion, Yale University

2007 Distinguished Scientist Lecture, Brookhaven National Laboratory

2007 Concordia University Distinguished Scientist Lecturer

2007 Gravity Research Foundation Prize Award
2007 Michelson Centenary Lecturer, US Naval Academy.
2007 Inaugural Beyond Institute Lecturer, Arizona State University
2008 Centennial Lecturer, University of Arkansas
2008 Bradley Lecturer, American Enterprise Institute
2008 2008 Michigan State University Distinguished Lecturer
2009 National Lecturer, Australian National Science Week
2010 Todd Lecturer, Butler University
2010 Woods Lecturer, Norwich University.
2010 Smith Lecturer, Davidson College
2010 Distinguished University Lecturer, U. Alberta, Edmonton
2010- Distinguished Visiting Professor, Australian National University
2011 James and Jean Davis Prestige Visiting Fellow, Otago University
2011 Miegunyah Distinguished Visiting Fellowship, University of Melbourne
2012 Irving K. Barber Lecture, University of British Columbia
2012 The Little-Franklin Lecture, Auburn University
2012 Institute of Physics Lecturer, Hobart Tasmania
2012 Math for America Lecturer, UCSD
2013 Distinguished Lecturer Award, Medical Health Physics Society
2013 Distinguished Lecturer, Williams College
2013 Dean's Distinguished Lecturer, University of Texas at Austin
2013 Distinguished Dean's Lecturer, Radcliffe College
2013 Distinguished Lecturer, University of New Orleans
2013 Asimov Panelist, AMNH
2013 Gordon Tomkins Lecture, UC San Francisco
2013 Laureate of International Academy of Humanism
2014 Distinguished Lecturer, University of Wisconsin- Madison
2014 Allele Lecturer, University of Alabama
2014 Michael West Lecturer, Queen's University Belfast
2015 Fetzer Memorial Lecture, Nebraska Wesleyan University
2016 Schrodinger Lecturer, University of Zurich
2016 The President's Forum for Critical Thought Lecturer, Eastern Washington University
2016 Conway Memorial Lecturer, Conway Hall
2017 Frontiers Lecturer, American Museum of Natural History

Positions, Offices and Memberships, etc. (since 1977):

1977	Board of Directors, Canadian Assoc. of Physicists
1981-83, 89-	Member (Life), American Physical Society
1983	APS Forum on Physics and Society Awards Cmte.
1985-1987	Yale University Course of Study Committee
1987	Convenor, Lewes Center Summer Meeting on Cryogenic Detection Neutrinos and Dark Matter
1988-1991	Sigma Xi-Committee on Lectureships
1988-	Co-organizer, Yale Workshop on Cosmic Strings
1988	Convenor- Cosmology and Astrophysics, APS Particles and Fields Conference 1988
1989	Program Committee, International Conference on Particles and Nuclei
1989	Co-organizer, Yale Workshop on the Cosmic Microwave Background
1989	Member, Panel on Particles of the Astronomy and Astrophysics Survey Committee
1992	Co-organizer, Texas Meeting on Baryon Number Violation at the Weak Scale.
1992	Director, Association of Yale Alumni Program: The Legacy of Newton
1992	Co-organizer, Aspen Workshop on Gravitational Lensing in Cosmology.
1992	Organizing committee, Colliding Beam Conference, Yale University Oct 2-3 1992
1992-	Program Committee Member, Moriond meetings on Electroweak Interactions,
1993	Organizer, Case Meeting on New Physics at New Facilities, Oct 15-17 1993
1994	Organizer, CWRU Workshop: CMB Two Years after COBE, April 22-24, 1994
1994-	Executive Committee, Board of Trustees, Friends, Cleveland School for the Arts
1995	Organizer, Aspen Center for Physics Workshop on Big Bang Nucleosynthesis
1995	Member Exhibits Committee, Great Lakes Science Center Board of Trustees
1995-	Member, American Astronomical Society
1995-1998	Member, Faculty Senate of Case Western Reserve University
1995-	Board of Trustees, Great Lakes Science Center
1995-1997	Organizing Committee, International Conference on Sources and Detection of Dark Matter
1995-	Member, New York Academy of Sciences

1995- Member, American Association for the Advancement of Science

1997 Organizing Committee, Early Universe Physics, England 1997

1997-2000 Executive Committee, Division of Astrophysics, American Physical Society

1997-1998 InfoWorld Futures Project Advisory Board

1997- Odyssey Magazine, Advisory Board

1997- Review Panel, M.I.T. Curriculum on Science and Communication

1998 Organizing Committee, Sheffield International Workshop on Dark Matter Detection

1997-1998 Search Committee, Vice-President for Research, Case Western Reserve University

1998- General Member, Board, Aspen Center for Physics

1998-2000 Editor, Modern Physics Letter A

1998-2000 Editor, Int. Journal of Modern Physics

1998- Chair, Exhibits Committee, Great Lakes Science Center Board of Trustees

1998- Executive Committee Great Lakes Science Center Board of Trustees

1999- Organizing Committee, International Conference on Sources and Detection of Dark Matter

1999 Co-Organizer, Aspen Workshop on the Cosmological Constant

1999- Fellow, American Physical Society

1999-2000 Organizing Committee, DPF 2000 meeting

1999-2000 Co-Organizer, Aspen Workshop on Dark Matter

2000-2001 CWRU, University Stakeholders Committee

2000-2002 American Physical Society, Panel on Public Affairs.

2000 International Advisory Committee, International Conference on Dark Matter Detection.

2001 Advisory Committee, Physics Potential of Supernova Neutrino Detection Meeting, UCLA Feb 2001

2001- Board of Advisors, The Skeptics Society

2001 Convenor, Frontiers of Physics Meeting, Vanderbilt Tenn, March 2001

2001 Chair, Pagels Lecture Committee, Aspen Center for Physics.

2002 International Advisory Committee, International Conference on Dark Matter Detection

2002 Board of Directors, Ohio Citizens for Science

2002 Member, HEPAP Public Outreach Panel

2002- Trustee, Board of Trustees, Cleveland Museum of Natural History

2002 Chair, President's Commission on Graduate Education and Research, CWRU

2002- Fellow, Committee for the Scientific Investigation
of Claims of the Paranormal

2002 Coordinator, Teachers Conference on Cosmology,
Institute of Theoretical Physics, Santa Barbara

2003-2006 Gemant Award Committee, AIP

2003- Board of Advisors, and Guidance Committee,
Science Fiction Experience, Seattle Washington

2003 Grand Judging Co-Chair, Physics, Intel Science and
Engineering International Science Fair

2003 Aspen Center for Physics Colloquium Chair

2003 Scientific Advisory Committee, SciPart'03

2003 Lilienfeld Prize Committee, APS

2003- Board of Directors, TalkingScience

2003- Board of Directors, Faststart Foundation

2005 Gemant Prize Committee, AIP

2004- Commentator, American Public Media's
Marketplace

2004-2005 Scientific Program Planning Committee, West
Quad, Case Western Reserve University Medical
School

2004- ACLU Board of Trustees, Cleveland

2004-2005 Chair, Advisory Committee on Research
Computing, Information Technology Services,
CWRU

2004-2005 Strategic Planning Review Coordinator, Department
of Chemistry, CWRU.

2004 Aspen Institute, Executive Seminar

2004 NSF Physics Education Grant Review Panelist

2004-2005 Aspen Center for Physics, Public Lecture
Committee

2005 Jury Member, Sundance Film Festival

2005 Elected, Chair-Elect, APS Forum on Physics and
Society

2005- Board of Advisors, Defcon (Defense of the
Constitution).org

2005 APS Burton and Szilard Award Committee

2005- Commentator, NPR's All Things Considered

2006- Chair-Elect, Physics Division, American
Association for the Advancement of Science

2006 International Advisory Board, International
Colloquium on Group Theoretical Methods in
Physics

2006- Chair, Advisory Board, Help Ohio Public Schools

2006- Board of Sponsors, Bulletin of the Atomic
Scientists

2006- National Advisory Board, Office of Public Policy,
Center for Inquiry

2006- National Advisory Board, Scientists and Engineers
for America

2007-	NASA Primordial Polarization Program Definition Team
2007-	Scientific Organizing Committee, International Astronomical Union Symposium, Astronomy and Society
2007	Scientific Organizing Committee, Texas Symposium on Relativistic Astrophysics
2007-	Steering Committee, Science Debate 2008
2008	Science Advisory Committee, Barack Obama Presidential Campaign
2009-	Panel on Public Affairs, American Physical Society
2009-	Chair, Board of Sponsors, Bulletin of the Atomic Scientists
2009	Advisory Board, Dark Matter International Workshop
2009	Chair, Board of Directors, Science Friday Foundation
2010 - 2015	Board of Directors, Federation of American Scientists
2011	International Advisory Committee, Identification of Dark Matter Conference
2012	Board of Directors Center for Inquiry
2012	Physics Editorial Board for the College Access Project
2012	APS Forum on Physics & Science Executive Committee
2013	Chair, Board of Governors, Australia-New Zealand Institute of Theoretical Physics
2013	Member, International Academy of Humanists
2015	Chair, Board of Sponsors, Bulletin of the Atomic Scientists
2015	Board of Experts, Federation of American Scientists
2016	Advisory Committee, Breakthrough Starshot

Major Lectures:

(a) *University or Laboratory Colloquia* (does not include seminars):

Harvard University 1983	California Institute of Technology 1984
Stanford University 1984	U. Mass Amherst 1984
MIT 1984	Institute for Theoretical Physics-UCSB 1984
SLAC 1985	U.C. Santa Barbara 1985
CITA-Toronto 1985	TRIUMF 1985
DAO-Victoria 1985	University of Chicago 1985
Brookhaven Laboratory 1986	New York University 1987
Stanford University 1987	University of Illinois 1987
Brown University 1987	University of Chicago 1987

MIT-1987
 LBL-1988
 U.C. Irvine 1988
 Institute d'Astrophys. Paris 1989
 McGill 1990
 Brigham Young University 1991
 Yale University 1991
 University of Cincinnati 1991
 ATT 1992
 NIST 1992
 Naval Research Lab 1993
 NASA-Goddard 1994
 Case Western Reserve 1995
 Harvard University 1995
 U.C. Riverside 1996
 Simon Fraser University 1996
 University of Minnesota 1996
 CERN 1997
 U.T. Austin 1997
 Cal. State Long Beach 1997
 University of Akron 1998
 Directors Colloquia, LANL 1998
 Johns Hopkins University 1998
 NIST 1998
 CWRU 1998
 Washington U. St. Louis 1999
 University of Montreal 1999
 Aspen Center for Physics 1999
 Dartmouth 1999
 University of Kansas 1999
 Stanford 2000
 Michigan State University 2000
 Wayne State University 2000
 University of Arkansas 2000
 University of Il. Urbana 2000
 University of Akron 2000
 Lawrence Berkeley Lab. 2001
 University of Texas Austin 2002
 Vanderbilt University 2002
 KITP, Santa Barbara, 2002
 Clark University 2003
 Washington University 2004
 Stockholm University 2004
 McMaster University 2005
 Stanford University 2005
 University of Chicago 2005
 Rockefeller University 2005
 Kent State 2005
 Harvard University 2006
 Ecole Polytechnique 1988
 Arizona, 1988
 Michigan 1989
 Cincinnati 1989
 William and Mary 1990
 City College of New York 1991
 Queen's University 1991
 University of British Columbia 1992
 University of Florida 1992
 Case Western Reserve 1992
 NYU 1993
 Institute for Advanced Study 1994
 Chinese University of Hong Kong 1995
 Ohio State University 1996
 University of British Columbia 1996
 University of Maryland 1996
 Caltech 1996
 ETH 1997
 CERN 1997
 CWRU 1997
 University of Kentucky 1998
 Purdue University 1998
 University of New Mexico 1998
 ICTP Trieste 1998
 Catholic University of America 1998
 Penn State University 1999
 M.I.T. 1999
 Notre Dame 1999
 Kansas State 1999
 Caltech 2000
 U.C. San Diego 2000
 U. C. Berkeley 2000
 Indiana University 2000
 Fermi National Accelerator Lab 2000
 Xerox PARC Research Center 2000
 Syracuse University 2001
 University of Rochester 2001
 Cornell University 2002
 University of British Columbia 2002
 NYU 2003
 UNC 2004
 Upsalla University 2004
 University of Virginia 2005
 Oak Ridge National Laboratory 2005
 Wittenberg College 2005
 IBM Yorktown Heights 2005
 Institute for Advanced Study 2005
 Columbia University 2006
 Case Western Reserve University 2006

Vanderbilt University 2006	University of Kansas 2007
Allegheny College 2007	U.C. Berkeley 2007
Physical Review, APS 2007	McGill University 2007
University of Arkansas 2008	University of Michigan 2008
Old Dominion University 2008	Michigan State University 2008
University of Zurich 2008	Arizona State University 2008
University of Arizona 2009	Case Western Reserve University 2009
University of Texas 2009	Space Telescope Science Institute 2009
University of Auckland, 2010	University of Melbourne 2010
NASA Goddard 2010	Australian National University 2010
Max Planck Inst. Hanover 2010	Inst. Math Phys. Of Universe, U. Tokyo 2010
Institute for Advanced study 2011	Jet Propulsion Laboratory 2011
University of Otago 2011	University of California, San Diego 2011
University of Melbourne, 2011	Australia National University 2011
Mount Stromlo 2011	CERN 2011
Macquarie University 2012	Columbia 2012
UCSB 2012	Williams College 2013
Gran Sasso Laboratory 2013	Yale University 2013
University of Manchester 2013	Harvard 2016

(b) Conferences -Invited Lectures:

3M Lecture series- Carleton College, 1982
 Western Theoretical Conference, 1982
 Neutrino, 1984
 EST Meeting, 1984
 Telemark Neutrino Conference, 1984
 Yale Theoretical Advanced Study Institute in Elementary Particle Physics, 1985
 Moriond, 1986
 Fermilab Beam Dump Workshop, 1986
 Seventh Vanderbilt High Energy Physics Conference, 1986
 International Conference on High Energy Physics (2 lectures), U.C. Berkeley, 1986
 Opening Lecture, Rencontres de Moriond, 1987
 AAAS Annual Meeting, 1988
 Rencontres de Moriond, 1988 (2 lectures)
 APS Baltimore Meeting, 1988
 Plenary Lecture-APS/AAPT New England Meeting, 1988
 Plenary Lecture, Neutrino 1988
 MIT Conference on Gravitational Lenses, 1988
 Yale Workshop on Cosmic Strings, 1988
 Plenary Lecture, Berkeley Conference on Particle Astrophysics, 1988
 Aspen Winter Conference, 1989
 Rencontres de Moriond, 1989 (2 lectures)
 APS Baltimore Meeting, 1989
 Plenary Lecture, French Physical Society 1989
 Moriond, 1990 (2 lectures)
 Wisconsin Phenomenology Conference, 1990

IUPAP Conference, 1990
 APS New England Meeting, 1990
 After the First Three Minutes, 1990
 International Conference On Trends in Particle Astrophysics, 1990
 APS New England Meeting, 1991
 XIV International Warsaw Meeting on Elementary Particle Physics, 1991
 2nd International Conference on Theoretical and Phenomenological Aspects of
 Underground Physics, 1991
 Aspen Winter Conference on Particle Physics, 1992
 Symposium on Black Holes Strings, Wormholes, 1992
 Florida Workshop on Dark Matter, 1992
 Franklin Symposium on Neutrino Physics, 1992
 IVth Rencontre de Blois: Particle Astrophysics, Plenary Lecture, 1992
 Plenary Lecture, International Conference on Particle Physics, 1992
 International Conference on Neutrino Astrophysics, 1992
 Moriond meeting on Atomic, Gravitational and New Physics, 1993
 International Workshop on Neutrino Telescopes, 1993
 Rencontres de Physique de la Vallee d'Aoste, La Thuile, 1993
 Opening Lecture, Moriond Meeting on Electroweak Interactions, 1993
 Twelfth International Workshop on Weak Interactions, 1993
 International Conference on Particle Astrophysics, 1994
 Nordic Winter School on Particle Physics, 1994
 U.C.L.A. Conference on Critiques of Sources of Dark Matter, 1994
 INT Meeting on Solar Modelling and Solar Neutrinos, 1994
 Snowmass Workshop on Particle Astrophysics, 1994
 Trends in Particle Astrophysics, 1994
 Polish Workshop on Particle Physics: From the Weak Scale to the Planck Scale, 1994
 ITP Santa Barbara, Clustering and Cosmic Microwave Workshop, 1995
 Keynote Speaker, Ohio Section, American Assoc. of Physics Teachers, 1995
 Keynote Speaker, National Teacher Training Institute, 1995
 Teacher Resource Workshop -Am. Ass. of Phys. Teachers Nat. Meeting, 1995
 Rencontre du Vietnam, October 1995
 Plenary Speaker, Pan Asian Conference on Cosmology, 1996
 International Conference on Sources and Detection of Dark Matter, UCLA 1996
 Keynote Speaker, Ohio Section, American Physical Society, 1996
 Plenary Speaker, International Workshop on Neutrino Telescopes, 1996
 Plenary Speaker, Dark Matter, 1996
 Keynote Speaker, Ohio Aerospace Institute Professional Conference, 1996
 American Association of Physics Teachers/Long Island Physics Teachers Conference,
 1996
 La Thuile, Rencontre de Physique, 1997
 Napoli Thinkshop on Astrophysics: The Search for Extraterrestrial Intelligence, 1997
 Rome Conference on the Future of the Standard Model, 1997
 San Minateo Conference: The Irresistible Rise of the Standard Model, 1997
 Edoardo Amaldi Meeting on Gravitational Waves, CERN 1997
 Nasa Lewis Meeting: Breakthrough Propulsion, 1997
 DOE, Office of Energy Research, Science Themes and Strategic Planning, 1998
 International Conference on Sources and Detection of Dark Matter, UCLA 1998
 Space Policy Institute: Plenary Lecturer, Symposium on Astrobiology and the Search

for Extraterrestrial Life, George Washington University, March 1998
 PASCOS 1998, Plenary Lecture, March 1998
 Keynote Speaker, APS-AAPT Educator Workshop, Columbus, April 1998
 Plenary Speaker, Tropical Workshop on Particle Physics and Cosmology, April 1998
 Henry Steel Lecture, Mid-American Orthopedic Assn, April 1998
 Plenary Lecturer, WEIN98, International Conference on Physics Beyond the Standard Model, June 1998
 Keynote Address, Fermilab Annual Users Meeting, August 1998
 Plenary Speaker, International Workshop on Dark Matter, September 1998
 Conference on Relic Neutrinos, September 1998
 NASA Space Exploration Planning Meeting, Lewis Research Center, September 1998
 Pritzker Symposium and Workshop on Inflationary Cosmology, February 1999
 Gordon Conference, Nuclear Chemistry, Keynote lecture, June 1999
 Aspen Center for Physics Workshop on the Cosmological Constant, June 1999
 Plenary Opening Lecture, Am. Assoc. of Physics Teachers Nat. Meeting, August 1999
 Workshop on Physics of the Early Universe, Newton Institute, September 1999
 Plenary Lecture, Cosmo 99, ICTP, September 1999
 Plenary Lecture, News from the Universe Meeting, DESY, October 1999
 Chairman and Speaker, National Academy of Sciences Frontiers of Science Meeting, Beckman Center, November 1999
 British Particle Physics Association/Royal Astronomical Society Annual Conference, April 2000
 National Academy of Sciences Annual Meeting, April 2000
 Kallen Memorial Symposium, May 2000
 WIPP Underground Physics Workshop, June 2000
 Problems of Vacuum Energy, August 2000
 Science in the 21st Century, August 2000
 Opening Lecture, Third International Workshop on the Detection of Dark Matter, September 2000
 The Far Future of the Universe, The Vatican, November 2000
 Invited Lecture, MRI International Meeting, February 2001
 Plenary Lecture, Int. Conference on Neutrino Telescopes, March 2001
 National Academies Symposium on Physics, June 2001
 TASI Summer School, June 2001
 Plenary Lecturer, Cottrell Scholars Workshop, July 2001
 National Research Council and American Physical Society, "Grand Challenges for the 21st Century, U.S. House of Representatives, July 2001
 Scottish Universities Summer School in Physics, August 2001
 Opening Lecture, COSMO 2001, International Meeting on Particle Physics and the Early Universe, August 2001
 Workshop on Cosmological Probes of Dark Energy, December 2001
 Plenary lecture ESO-CERN-ESA Symposium on Astronomy, Cosmology and Fundamental Physics, March 2002
 Plenary Lecture, APS Ohio Section Meeting, April 2002
 Plenary Lecture, Canadian Association of Physicists Annual meeting, June 2002
 Featured Speaker, Gordon Research Conference on Organic Reactions, July 2002
 Plenary Lecture, Portuguese Physical Society, September 2002
 Institute for Theoretical Physics Workshop on Dark Matter and Dark Energy, Sept.-Nov. 2002

Institute for Theoretical Physics, Santa Barbara Teachers Workshop on Cosmology, October 2002
 Lecturer, Canary Islands Winter School in Astrophysics, November 2002
 Invited Plenary Lecture, "From Here to Eternity" Conference in honor of J. Silk's 60th Birthday, Oxford University, December 2002
 Invited Topical Lecturer, AAAS Annual Meeting, February 2003
 Plenary Lecture, Physical Cosmology '03, June 2003
 Plenary Lecture, Respect for All Involved: A National Symposium on Research Integrity, Columbia University, CUNY, September 2003
 Opening Lecture, CERCA conference on the Future of Cosmology, October 2003
 Great Lakes Planetarium Assoc Plenary Lecture, October 2003
 Sources and Detection of Dark Matter and Dark Energy in the Universe, UCLA, February 2004
 American Physical Society Meeting, April 2004
 Aspen Institute and Aspen Center for Physics Einstein Celebration, August 2004
 COSMO '04, September 2004
 Evolution and God Symposium, October 2004
 CERCA, Science and Society Symposium, October 2004
 World Congress of Science Producers, November 2004
 Aspen Center for Physics Winter Meeting, February 2005
 Seventh Symposium, Internacional Physica, February 2005
 Princeton-Oxford Cosmology Meeting, March 2005
 American Physical Society Meeting, April 2004
 NASA Huntsville World Year of Physics Conference, April 2005
 SLAC Summer School in Physics, Summary Lecturer, Aug 2005
 100 Years in Physics Conference, August 2005
 International Conference on Physics Education, September 2005
 APS Nuclear Physics Conference, October 2005
 International Conference on Humanism, November 2005
 Canadian Undergraduate Physics Conference, November 2005
 Inaugural Kavli Institute New Views of the Universe Conference, University of Chicago, Opening Lecture, December 2005
 Aspen Center for Physics Winter School, January 2006
 III International Workshop on: NO-VE, Neutrino Oscillations, February 2006
 Sources and Detection of Dark Matter and Dark Energy in the Universe, UCLA, February 2006
 Michigan State Science Teachers Conference, February 2006
 Confronting Gravity, March 2006
 NES APS and AAPT Conference, Boston University, March 2006
 Texas A&M Forefront of Physics Meeting, April 2006
 Hadron Collider Physics Symposium, Duke University, May 2006
 Communicating Science and Technology, June 2006
 Neutrino 2006, June 2006
 Ideas Festival, Aspen Institute, July 2006
 Under the Spell of Physics, July 2006
 Banff Center, Science Communication, August 2006
 Max Delbruck Fest, Cold Spring Harbor Lab, August 2006
 Evolution and Faith, Marist College, October 2006
 Beyond Belief, Salk Institute, November 2006

Science and Society, January 2007
AAAS Annual Meeting, February 2007
Open Questions in Cosmology, Imperial College, March 2007
APS Annual Meeting, April 2007
Society for Heart and Lung Transplantation, April 2007
American Physiological Society, April 2007
Dark Matter Workshop, Fermilab, May 2007
New Horizons at Colliders, Brookhaven National Laboratory, May 2007
European Conference of Science and Technology Museums, June 2007
Canadian Association of Physicists National Meeting, June 2007
Idea City, June 2007
Workshop on Supernovae, June 2007
Science and Media Conference, July 2007
Ideas Festival, July 2007
Fundamental Questions, FQXI Meeting, July 2007
Chalonge Meeting on Cosmology, August 2007
NASA Thermal and Fluids Workshop, September 2007
International Conference on Science and Humanism, October 2007
Genoa Science Festival, October 2007
Kshitij, January 2008
American Association for the Advancement of Science Annual Meeting, February 2008
Science and Religion workshop Aspen Institute, March 2008
American Atheists Association, March 2008
American Chemical Society Annual Meeting, President's Session, April 2008
Trieste Science Media Festival, April 2008
Space Telescope Science Institute Meeting on Dark Energy, May 2008
World Science Festival, May 2008
Fermilab Workshop of Gravitational Waves and Polarization, Fermilab, June 2008
Chalonge Meeting on Cosmology, July 2008
Cosmo 08, August 2008
Sea of Faith Conference, September 2008
Science and Public Policy, Minneapolis Innovation Meeting, October 2008
Beyond Belief, Salk Institute, October 2008
Canadian Undergraduate Physics Association, October 2008
Tokyo Meeting in Honor of K. Sato, November 2008
Texas Symposium on Relativistic Astrophysics, Plenary Speaker, December 2008
UNESCO International Year of Astronomy Inaugural Meeting, Plenary Speaker,
January 2009
AAAS Annual Meeting, February 2009
AAPT Annual Meeting, February 2009
Inaugural Origins Symposium, April 2009
Fifth International School on Field Theory and Gravitation, April 2009
Physics and the Universe, May 2009
IAU International Symposium, August 2009
Institute of Cosmology 20th Anniversary Meeting on Cosmology, August 2009
Atheist Alliance International Plenary Speaker, October 2009
Penn Center for Astroparticle Physics Inaugural Symposium, December 2009
Physics of the Universe Conference, Caltech January 2010
Doomsday Clock Symposium, January 2010

Unsolved Problems in Gravity, January 2010
Origins of Human Uniqueness and Behavioral Modernity, February 2010
Rightful Place of Science, May 2010
Origins of Morality, November 2010
Origins of Life: the RNA World Revisited, February 2011
Origins Science and Culture Festival, April 2011
The Amazing Meeting, July 2011
Club COSMOS, August 2011
Ultimo Science Festival, August 2011
Singularity Summit, August 2011
Denkfest, September 2011
Peace Bar Festival, October 2011
Science Teller Festival, November 2011
Doomsday Clock Symposium, January 2012
Darwin Week, The University of Northern Iowa, February 2012
AAAS Annual Meeting, February 2012
Reason Rally, March 2012
American Atheists National Convention, March 2012
Global Atheists Convention, April 2012
ISHLT Annual Meeting, April 2012
Vanity Fair Tribute to Christopher Hitchens, April 2012
Annual Health Disparities Leadership Summit, April 2012
Auckland Writers & Readers Festival, May 2012
Atheists Alliance International North American Convention, May 2012
World Science Festival, May 2012
Aspen Ideas Festival, July 2012
Aspen Center for Physics, May 2012
The Amazing Meeting, July 2012
Canberra Skeptics, September 2012
The Big Bang and the interfaces of knowledge towards a common language, October 2012
Origins of Deception, October 2012
Math for America, October 2012
Sky & Telescope Cosmic Trails 5 Cruise, November 2012
World Economic Forum, January 2013
Climate Change Workshop, February 2013
Question, Explore, Discover, April 2013
Sydney Writer's Festival, May 2013
HowTheLightGetsIn2013, May 2013
Oklahoma Freethought Convention, June 2013
Conference in Honour of the 90th Birthday of Freeman Dyson, August 2013
The Nobel Conference, September 2013
The New Yorker Festival, October 2013
Smart Festival, October 2013
ECAR Annual Meeting, January 2014
Great Debate Parallel Realities: Probing Fundamental Physics, February 2014
AAAS Annual Meeting, February 2014
American Physical Society Annual Meeting, February 2014
IB Asia Pacific Annual Conference 2014, March 2014

Great Debate Transcending Our Origins, April 2014
NECSS Conference, April 2014
AFO Festival, April 2014
HowTheLightGetsIn2014, May 2014
Galapagos Voyage, June 2014
CFI Galapagos Archipelago, June 2014
BrisScience Talk, August 2014
The Victorian Skeptics, August 2014
World Economic Forum Annual Meeting of the New Champions, September 2014
Zocalo Public Square Can Science Fiction Revolutionize Science?, September 2014
Apostacon, September 2014
Freeflow 2014, October 2014
La Ciudad de las Ideas, November 2014
Plenary Invited Lecture, 21st International Congress of the Australian Institute of Physics, December 2014
World Economic Forum Annual Meeting 2015, January 2015
Great Debate Extinctions: Tragedy to Opportunity, February 2015
AFO Festival, April 2015
American Humanist Association Annual Conference, May 2015
HowTheLightGetsIn, May 2015
Skeptics Conference, May 2015
Imagine No Religion 5, June 2015
ISS2015, June 2015
The Non-Conference, August 2015
ASU School of Earth and Space Exploration Discover Lecture Series, August 2015
La Ciudad de las Ideas, November 2015
Union Theological Society, November 2015
Scientific Controversies with Janna Levin, November 2015
Devoxx Belgium, November 2015
Science and Adventure in Antarctica, December 2015
Einstein's Legacy, Celebrating 100 Years of General Relativity: An Origins Project Panel, January 2016
Trondheim Science Week, March 2016
Origins of the Future, April 2016
HowTheLightGetsIn, May 2016
Reason Rally, June 2016
Aspen Ideas Festival, June 2016
SciFoo 2016, July 2016
Frankfurt Experimental Search for Quantum Gravity Conference, September 2016
2016 Blouin Creative Leadership Summit, September 2016
Freedom from Religion National Convention, October 2016
Fysikdagarna Conference, October 2016
Australian Skeptics National Convention, November 2016
Star Trek: The Cruise, January 2017
ReasonCon3, April 2017
Absicon Panel: Managing Earth as a Planet, April 2017
Origins Water Workshop, April 2017
Sydney Writers Festival, May 2017
Hay Festival, May 2017

Imagine No Religion 7, May 2017
Auckland Writers Festival, May 2017
Geek Picnic, June 2017
4th European Conference for Science Journalists, June 2017
IEEE International Frequency Control System and European Frequency Time Forum,
July 2017

(c) Major Public Lectures:

Nesbitt Lecture, Carleton University, November 1988
Museum of Natural History/ New York Astronomical Society Lecture, December 1989
National Air and Space Museum--Opening Lecture
Hughes-Danbury Series, February 1990
New York Open Center---Visions of the 21st Century Series, NYU, October 1990
15 Sigma Xi National Lectures, 1991-93
Wheeler Opera House, January 1992
Cleveland Museum of Natural History, May 1994
Smithsonian-Associates, Department of the Interior, Washington 1995
Wheeler Opera House, January 1996
U.C. Berkeley, February 1996
Cincinnati Museum of Natural History, March 1996
Royal Ontario Museum, April 1996
Ohio Aerospace Institute, May 1996
Smithsonian Institution, August 1996
Lawrence Livermore Laboratory, August 1996
Carleton University, October 1996
Howard Hughes Lecture, Case Western Reserve University, October 1996
University of Minnesota, November 1996
Ontario Science Centre, November 1996
Canadian Museum of Civilization, February 1997
CERN, March 1997
Museum of Innovation, April 1997
U.S. Coast Guard Academy, April 1997
Great Lakes Science Center, May 1997
Citta della Scienza, June 1997
Hays Lecture, Oberlin College, September 1997
Glover Lecture, Dickinson College, September 1997
Cal State University at Long Beach, Odyssey Program, September 1997
Cleveland Museum of Natural History, 1997
Hayden Planetarium, November 1997
Smithsonian Institution, November 1997
Commencement Address, Hiram College, May 1998
Jodrell Bank Observatory, September 1998
Chesley Lectures, Carleton College, 1998
Herzfeld Lecture, Catholic University of America, 1998
American Physical Society, Centennial Meeting, 1999
Cleveland Museum of Natural History, 1999
Irish Science Week, 1999

Hendrik de Waard Lecture, 1999
 Stark Lecture, University of Arkansas, March 2000
 Vanden Miles Lecturer Wayne State University 2000
 Harvard Millennium Lecture, 2000
 Edinburgh Science Festival Lecture, 2000
 Inaugural Asian Physics Olympiad Lecture, 2000
 National Academy of Sciences, April 2000
 Kallen Memorial Symposium, Lund Sweden May 2000
 Keynote Public Lecture, WIPP Center, June 2000
 Heinz Pagels Memorial Lecture, Paepke Auditorium, July 2000
 City Club Forum, Cleveland OH, August 2000
 Narration, The Planets, with Cleveland Orchestra, Blossom Music Center, 2000
 York, United Kingdom, September 2000
 Performers and Artists for Nuclear Disarmament Concert, September 2000
 Benedum Lecture, West Virginia University, October 2000
 Association of Science and Technology Centers (ASTC2000) Annual Meeting,
 October 2000
 Xerox Palo Alto Research Center, November 2000
 John Carroll University, November 2000
 Great Minds Lecture Series, Illinois Math and Science Academy, December 2000
 Quark Matter 2001, January 2001
 Rochester Lecture, University of Durham, February 2001
 Asimov Panelist, Museum of Natural History, February 2001
 Vanderbilt University, March 2001
 Rorschach Lecture, Rice University, March 2001
 Shell Lecture, Natl Assoc. of Science Teachers Annual Meeting, March 2001
 Inauguration Lecture, Clark University, March 2001
 OLeary Distinguished Scientist Lecturer, Gonzaga University, April 2001
 Morgan Lecturer, Texas Christian University, April 2001
 Malstrom Lecture, Hamline University, April 2001
 Distinguished Author Lecture, Museum of Natural History, April 2001
 Skeptics Lecture, Caltech, May 2001
 National Academy of Science, June 2001
 Aspen Center for Physics, July 2001
 Snowmass CO, July 2001
 Lawrence Centenary Lecture, U.C. Berkeley, July 2001
 Directors Distinguished Lecture, Lawrence Livermore Laboratory, July 2001
 2001 University National Colloquium, Wesleyan University, September 2001
 Fermi Centennial Lecture, Fermi National Laboratory, October 2001
 People Have the Power Tour, with Ralph Nader, Cleveland OH, October 2001
 Keynote Address, Virginia Assoc. of Science Teachers, November 2001
 John Carroll University, November 2001
 Evolution and God Symposium, Allen Theater, March 2002
 Ohio Board of Education, March 2002
 Friedman Lecture, Penn State University, April 2002
 City Club, Cleveland, April 2002
 Arts and Science Lecture Series, Portland Arts Center, May 2002
 Gemant Lecture, William and Mary College, May 2002
 Milton Lecture, Syracuse University, October 2002

Chancellor's Lecture, Vanderbilt University, October 2002
 City Club, Cleveland, December 2002
 Perimeter Institute Public Lecture, December 2002
 Science and Religion Lecture, John Carroll University, January 2003
 Science and Journalism Lecture, Carleton University, February 2003
 KITP Public Lecture, March 2003
 Waynick Lecture, Penn State University, April 2003
 Hamilton Lecture, Princeton University, April 2003
 Woods Lecture, Westminster College, May 2003
 Explorer Lecture, Cleveland Museum of Natural History, May 2003
 European Space Agency, Distinguished Scientist Lecture, Holland, June 2003
 Space Place, Madison Wisconsin, August 2003
 Five College Lecture, U. Mass Amherst, October 2003
 Presidential Lecture, Clark University, November 2003
 Odyssey Lecture, Cal State, Long Beach, Dec 2003
 Barnhart Lectures, Coastal Bend College, March 2004
 Wilson Distinguished Lecture, Berry College, March 2004
 Glicksman Lecture, Brown University, May 2004
 Aspen Institute, Beyond Einstein Symposium, August 2004
 White Dog Cafe, Philadelphia, September 2004
 ACLU Annual Likover Lecture, October 2004
 Evolution and God Symposium, October 2004
 Futures Forum, Cleveland, October 2004
 Samuel Newton Taylor Lecture, Goucher College, November 2004
 AAAS Lecture, December 2004
 Origins Institute Lecture, McMaster University, January 2005
 Rudin Distinguished Scholar Lecture, Manhattan Marymount College, March 2005
 Distinguished Undergraduate Lecture, U.T. Austin, March 2005
 Benson Lecture, Miami University, March 2005
 NASA Huntsville, World Year of Physics/Millennium 2 lecture, April 2005
 World Year of Physics, American Physical Society Public Lecture, April 2005
 World Year of Physics, Sigma Pi Sigma Lecture, Wright State, April 2005
 Crump Lecture, St. Andrews School, April 2005
 San Jose Resident Scholar Lecture, April 2005
 Explorer Lecture, Cleveland Museum of Natural History, May 2005
 University of Georgia, VP Research Open Forum, June 2005
 University of Washington/ Wenatchee Confluence Technology Center, July 2005
 Blossom Music Center, Cleveland Orchestra, Holst, The Planets, July 2005
 Vancouver British Columbia, Rodgers Lecture American Urology Assoc., August 2005
 100 Years in Physics, Singapore, August 2005
 International Conference on Physics Education Public Lecture, August 2005
 2005 Jonah Lecture, Mount Allison University, September 2005
 Maui, Hawaii, APS Nucl. Conference Public Lecture, Sept 2005
 Visions Colloquium, IBM Yorktown Heights, October 2005
 St. Louis Science Center, October 2005
 University Lecture, Rockefeller University, October 2005
 Center for Inquiry Lecture, New York Academy of Medicine, October 2005
 Presidential Lecture, Tulsa, OK, October 2005
 American Enterprise Institute Keynote Address, October 2005

National Council of Science Writers, October 2005
International Humanism Conference, October 2005
Canadian Undergraduate Physics Conference, October 2005
Skeptics Society Lecture, Caltech, October 2005
Categorically Not!, October 2005
Kavli Inst. Public Lecture, November 2005
World Congress of Science Producers, November 2005
Smithsonian Institution, November 2005
Frontiers of Astronomy, Cleveland Museum of Natural History, November 2005
World Year of Physics Lecture, Cleveland OH, November 2005
IBM Lecture, Wittenberg College, November 2005
Goethe Institute, November 2005
World Year of Physics Lecture, Kent State University, November 2005
Kavli Institute Public Forum on Cosmology, December 2005
Akron Press Club, January 2006
Wheeler Opera House, Aspen Winter Series, January 2006
Colorado College, February 2006
The City Club, Cleveland, February 2006
Cleveland Museum of Art, February 2006
Lower Columbia College, March 2006
St. Thomas, USVI, March 2006
College of New Jersey, March 2006
Wagner College, March 2006
Asimov Memorial Debate, American Museum of Natural History, March 2006
Bob Dole Center, University of Kansas, April 2006
Kalamazoo College, April 2006
Texas A&M University, April 2006
Duke University, May 2006
Smithsonian Institution, July 2006
Seattle Town Hall, September 2006
Yale University, September 2006
University of Colorado Boulder, September 2006
SUNY Binghamton, October 2006
Marist College, October 2006
Vanderbilt University, October 2006
Cleveland Orchestra, Severance Hall, December 2006
Rowfant Club, Cleveland OH, December 2006
Cleveland Museum of Natural History, January 2007
Nashville Unitarian Church, February 2007
University of Kansas, March 2007
TV of Tomorrow, San Francisco, March 2007
Allegheny College, March 2007
Smithsonian Institution, March 2007
Lawrence Hall of Science, April 2007
Dyer Observatory Exploration Night, April 2007
Veritas First Light Festival, April 2007
St. Olaf College, May 2007
Rally For Reason, May 2007
Brookhaven National Laboratory, May 2007

Caltech, June 2007
IdeaCity, Toronto, June 2007
Aspen Ideas Festival, July 2008
UCLA, July 2007
Center for Inquiry, Cleveland August 2007
Concordia University, October 2007
Genoa Science Festival, November 2007
Arizona State University Beyond Center, November 2007
Smithsonian Institution, January 2008
IIT, February 2008
University of Arkansas Centennial Lecture, February 2008
American Enterprise Institute, February 2008
Michigan State University Distinguished Lecture, April 2008
Trieste Science Festival, April 2008
University of Zurich, May 2008
U.C. Davis, June 2008
Great Lakes Science Center, June 2008
Ingenuity Festival, July 2008
City Club, Cleveland, August 2008
Sea of Faith, September 2008
Templeton Lecture, September 2008
Creative Nonfiction, October 2008
Beyond Belief, October 2008
Center for Inquiry, Portland, October 2008
Canadian Undergraduate Physics, October 2008
Science and Public Policy, October 2008
Hampshire College, October 2008
New York State Teachers Convention, November 2008
La Ciudad de las Ideas, November 2008
Fort Worth Texas, November 2008
UNESCO Inaugural meeting, International Year of Astronomy, Astronomy and Culture, January 2009
Darwinfest Minisymposium, Revolutionary Ideas, February 2009
Purdue University, February 2009
Middlebury College April 2009
New School, NY April 2009
University of Zurich, June 2009
World Science Festival, June 2009
Moonfest, NASA Ames, July 2009
Division of Particles and Fields Annual Meeting, July 2009
Australian National Science Week, National Lecturer, August 2009
Perimeter Institute, Quarks to the Cosmos October 2009
CFI National Cruise, November 2009
Scientific American Cruise, December 2009
Todd Lecture, Butler University, February 2010
Woods Lecture, Norwich University, February 2010
Beattie Lecture, McGill University, March 2010
Dunedin, New Zealand March 2010
University of Auckland, March 2010

Stockholm, April 2010
World Science Festival, May 2010
University of British Columbia, Vancouver, July 2010
Australian National University, September 2010
Smith Lecture, Davidson College, October 2010
University of Alberta and Telos Science Center, September 2010
30th Anniversary Secular Humanism National Conference, October 2010
National Association of Montessori Teachers Keynote Address, October 2010
Southern Oregon University, October 2010
University of Maryland, November 2010
Arizona State University, Great Debate November 2010
Light in Winter Festival, January 2011
World Economic Forum, January 2011
Arizona State University, Great Debate February 2011
Australia National University, February 2011
North Carolina State University, March 2011
Chicago Public Library, April 2011
American Atheists National Convention, April 2011
California Institute of Technology, April 2011
American Physical Society, May 2011
Center for Inquiry Cruise, May 2011
Australian National University, June 2011
Curtin University, June 2011
Miegunyah Lecture, August 2011
Oslo University Lecture, September 2011
School of Life Lecture, October 2011
Scientific American's Bright Horizons Cruise, October 2011
Smithsonian Lecture, January 2012
Caltech Lecture, January 2012
National Capital Area Skeptics Talk, January 2012
Ethical Humanists Society of Philadelphia, January 2012
Museum of Natural History Lecture, January 2012
ASU Origins Project, February 2012
Center for Inquiry, Calgary, February 2012
Irving K. Barber Lecture, University of British Columbia, February 2012
The Little-Franklin Lecture, Auburn University, March 2012
Chautauqua Institution, July 2012
Australian Institute of Physics, August 2012
London School of Economics and Political Science, September 2012
New College of the Humanities, September 2012
A Universe from Nothing in Amsterdam, September 2012
Lewes Skeptics in the Pub, September 2012
Portsmouth Lecture, October 2012
The Great Debate: The Origins of Deception, October 2012
United States Naval Academy, December 2012
Intelligence Squared Debate, December 2012
UCSB Sage Center Lecture, December 2012
Medical Health Physics Society, January 2013
The Smithsonian, January 2013

The Great Debate: Climate Change, Surviving the Future, February 2013
Williams College, February 2013
ANITA, February 2013
Science and Film Lecture, February 2013
TheBIGDebates – Islam or Science, February 2013
Oxford Union Debate, March 2013
Kit Kat Club, March 2013
Royal Swedish Academy, March 2013
Montana State University, March 2013
Science, Myth, Reality: the Unbelievers Panel Discussion, March 2013
The Storytelling of Science, March 2013
Isaac Asimov Memorial Debate: the Existence of Nothing, March 20, 2013
University of Texas at Austin, April 2013
University of Bergen, April 2013
University of Manchester, April 2013
Radcliffe Institute for Advanced Study, April 2013
University of New Orleans, April 2013
Australia National University, July 2013
Life, the Universe, and Nothing – A three-part conversation, August 2013
Carleton University, September 2013
The Royal Institution, October 2013
Het Denkgelag Royale, October 2013
University of South Florida, November 2013
UC San Francisco, November 2013
Canberra Skeptics Lecture, December 2013
University of Wisconsin, February 2014
United World College of South East Asia, March 2014
University of Alabama, April 2014
DAI – Heidelberg, October 2014
Astrophysics Research Center, October 2014
Origins Project Dialogue: Alda and Krauss, January 2015
A Passion for Science and Reason: An Evening with Richard Dawkins and Lawrence
Krauss, January 2015
Origins Project Dialogue: Life and the Universe, February 2015
Origins Project Dialogue: Randomness and Uncertainty, February 2015
Nebraska Wesleyan University, March 2015
Chomsky and Krauss: An Origins Project Dialogue, March 2015
For Thought Origins Lecture at Sydney Opera House, June 2015
For Thought Origins Lecture at The Wheeler Centre, June 2015
Singer and Krauss: An Origins Project Dialogue, October 2015
University of Helsinki, November 2015
New College of the Humanities, March 2016
Depp and Krauss: An Origins Project Dialogue, March 2016
Wycliffe College, March 2016
DiChristina and Krauss: An Origins Project Dialogue, April 2016
SpaceX, April 2016
Coalition for Excellence in Science and Math Education, June 2016
Political Bodies: Sex, Gender, & Reproductive Rights, September 2016
New College for the Humanities East Coast Lecture, October 2016

Origins Project Conversation: Inconvenient Truths – From Love to Extinction, October 2016
Swedish Humanist Association, October 2017
TIFF Trek Talks, November 2016
New College of the Humanities, December 2016
How to Academy, December 2016
Origins Project Lecture: Materiality of a Vacuum, January 2017
British Humanist Association Darwin Day Lecture, February 2017
Origins Project Great Debate: The Future of Artificial Intelligence – Who’s in Control?, February 2017
University of Alaska, March 2017
Phoenix Public Library, March 2017
Freethought Society, March 2017
New York Public Library, March 2017
Smithsonian, March 2017
North Carolina State University, March 2017
Triangle Freethought Society, March 2017
North Carolina Museum of Natural Sciences, March 2017
Skeptics Science Salon, March 2017
Center for Inquiry, March 2017
A Science Affair, April 2017
Powell’s City of Book, April 2017
Spirit of the Senses Salon, April 2017
Changing Hands Bookstore, April 2017
Town Hall Seattle, April 2017
Google Kirkland Campus, April 2017
Origins Conversation with Fisher Stevens, April 2017
Origins Conversation with Werner Herzog and Jeffrey Sachs, April 2017
An Evening with Lawrence Krauss - Vancouver, May 2017
An Evening with Lawrence Krauss – Melbourne, May 2017
An Evening with Lawrence Krauss – Canberra, May 2017
An Evening with Lawrence Krauss – Sydney, May 2017
An Evening with Lawrence Krauss & Matt Dillahunty, June 2017
Lawrence Krauss: “The Greatest Story Ever Told – So Far”, June 2017
Lawrence Krauss in conversation with Jim Al-Khalil, July 2017

(d) *Major Television Productions:*

Dark Matter in the Universe, BBC Antenna 1989
Escape from Earth, Discovery 1995
The Science of Star Trek, BBC and Discovery, 1995
Aliens, Are We Alone, Discovery 1995
Mysteries of the Universe, NOVA 1998
Universe 2001, Discovery and The Learning Channel 1999
Voyage to Mars, The Learning Channel 1999
The Final Frontier, BBC 2000-2001
Discovering the Universe, NHK 2001
How William Shatner Changed the World, Discovery, Mentorn Productions, 2005
Black Holes, Horizon, BBC, 2005

National Geographic “Naked Science: Space Travel 2005
 Discovery Channel: “The Science of Star Gate”. 2005
 The Physics of Space Travel, “Starman”, Pioneer Productions, 2005
 National Geographic, ‘Naked Science’, Origin of Structure, 2006
 The History Channel, The Big Bang, 2006
 Science Channel, The Hawking Paradox, 2006
 The History Channel, Modern Marvels Star Trek Tech (Hosted by me), 2007
 The History Channel, Beyond the Big Bang, 2007
 National Geographic, ‘Naked Science’, The Big Bang, 2008
 PBS, “400 Years of the Telescope”, 2008
 Naked Science, How to Kill a Planet 2009
 Discovery, How to Engineer a Star, 2009
 Discovery, The Big Bang, 2009
 National Geographic, Black Holes, 2009
 BBC, Black Holes, 2009
 Discovery, How to Engineer Galaxies, 2010
 Discovery, How to Engineer Supernovae, 2010
 Catalyst, Australian Broadcasting System, Sept and Oct 2010
 National Geographic, Parallel Universes, 2010
 How the Universe Works 2010-2017

(e) Music

Cosmic Reflections, Libretto for Narrated Symphony, World Premiere, Kennedy Center Nov 2009
 Introduction to Haydn’s *The Creation*, ASU Gammage Auditorium April 2015

(f) Radio and Television Commentary:

The Real Price of Creationism, February 12, 2004, Marketplace Commentary
Ideology Spending, March 24, 2004, Marketplace Commentary
Visa Battles, May 25, 2004, Marketplace Commentary
Another Space Race, July 29, 2004, Marketplace Commentary
Scientists Express Concern Over White House Policies Travis Smiley Show, October 26, 2004
Debate Over Intelligent Design Newshour with Jim Lehrer, August 5, 2005
Evolution and the Catholic Church Talk of the Nation Science, Friday, August 12, 2005
Theoretical Science Made Practical Marketplace Commentary, August 29, 2005
Hiding in the Mirror: The Mysterious Allure of Extra Dimensions Talk of the Nation Science Friday, October 21, 2005
Facing Reality: Public Policy, Science Education, and the Emperor’s New Clothes, CSPAN presentation of Keynote address at American Enterprise Institute, October 21, 2005
The Media Report: Bogus History and Pseudoscience, November 11, 2005
NPR’s All Things Considered Commentary: In Favor of Barring ID from the Science Classroom, December 20, 2005
Australian Radio National Interview with Stephen Crittendon, August 30, 2006
In the Eye of the Beholder Marketplace Commentary, January 30, 2007
University Presidents, Take Notes, Marketplace Commentary, April 30, 2007

Putting Lies and Fraud on Exhibit, Marketplace Commentary, May 25, 2007
The O'Reilly Factor, Fox Television, debate on Creation Museum, May 28, 2007
Scientific Illiteracy, CSPAN, telecast of speech at American Enterprise Inst, February 11, 2008
Daily Planet, Jan 20, 2009, interview in Paris following election of Barack Obama
Physics and the Universe, Radio New Zealand, interview on issues ranging from the future of the Universe to the Large Hadron Collider
Big Questions in Cosmology Talk of the Nation Science Friday, April 3, 2009
Discovery Channel Daily Planet Interview, May 2009, *Science of Star Trek*
A One-Way Trip to Mars? Talk of the Nation Science Friday, September 11, 2009
Exploring Space, TVO Ontario, Agenda Program, October 20, 2009
Adjusting the Doomsday Clock Talk of the Nation Science Friday, January 15, 2010
The Oil Spill and the Limits of Science Talk of the Nation Science Friday, June 4, 2010
The Physics of Star Trek The Brent Holland Show, July 7, 2010
Cosmology, Catalyst, September 16, 2010
Science and Morality Talk of the Nation Science Friday, November 5, 2010
SKA, Catalyst, February 17, 2011
Richard Feynman is The "Quantum Man" Talk of the Nation Science Friday, March 25, 2011
Where are all the Aliens?, Catalyst, March 31, 2011
Discovery of Other Earths, Catalyst, April 7, 2011
Connecting Science and Art Talk of the Nation Science Friday, April 8, 2011
Biggest Bang, Catalyst, June 16, 2011
In a Flash of Gamma-Rays a Star is Gone Talk of the Nation Science Friday, June 17, 2011
Parallel Universes, Catalyst, June 30, 2011
ABC Australia Canberra Radio AM Greg Bayliss Show, July 9, 2011
NATO plan to deploy ABMs in Europe RT News, December 9, 2011
Understanding the God Particle: Lawrence Krauss Explains the Higgs Boson, CBC Radio, December 16, 2011
Christopher Hitchens CNN, December 20, 2011
A Universe from Nothing Talk of the Nation Science Friday, January 13, 2012
Coast to Coast, January 14, 2012
Talk Radio Europe, January 19, 2012
Quirks and Quarks, The CBC, January 21, 2012
A Universe from Nothing Studio 4 with Fanny Kiefer, February 21, 2012
Reason Rally "Question Silly Beliefs" The Alyona Show, March 27, 2012
Big Bang Could End with a Whimper TV New Zealand, May 10, 2012
Why there is Something rather than Nothing Equal Time for Free Thought June 2, 2012
The Colbert Report, June 21, 2012
Hunting for Life in Other Worlds CNN, August 12, 2012
Science vs. Religion CNN, September 23, 2012
Fox with John Stossel, December 13, 2012
Real Time with Bill Maher, February 8, 2013
Anderson Cooper 360, February 15, 2013
ABC Australia Q&A, February 18, 2013
Gripping Science Tales Need not be Science Fiction Talk of the Nation Science Friday, March 29, 2013

The Morning Show, Global News Canada April 29, 2013
The Agenda with Steve Paikin, April 30, 2013
ABC Conversations with Richard Fidler, May 23, 2013
ABC Australia Q&A, May 27, 2013
Adam Hills Tonight, June 12, 2013
ABC Australia, June 29, 2013
The Agenda with Steve Paikin, July 3, 2013
The Agenda with Steve Paikin, July 4, 2013
The Hour with George Stroumboulopoulos, July 9, 2013
Custom Universe, Catalyst, August 29, 2013
Skeptic Fence Podcast, November 23, 2013
Equal Time for Free Thought, November 30, 2013
Detecting the “Bang” from the Big Bang, Talk of the Nation Science Friday, March 21, 2014
ABC TV Q&A, June 2, 2014
The Agenda with Steve Paikin, June 17, 2014
Larry King Now, August 11, 2014
Michael Feldman’s Whad’ya Know?, February 2015
The Weekly with Charlie Pickering, April 2015
ABC 7:30, June 29, 2015
ABC TV Q&A, June 29, 2015
The Weekly with Charlie Pickering, July 1, 2015
Science of Sci Fi Films – fact or fiction?, Catalyst, March 1, 2016
The Agenda with Steve Paikin, March 2016
Did Christopher Hitchens flirt with faith?, BBC Newsnight, May 20, 2016
Is Religion to Blame for Violence, Al Jazeera, July 16, 2016
The Life Scientific, BBC Radio, May 31, 2016
Why Are We Here? Physics Has Answers Talk of the Nation Science Friday, March 17, 2017
The David Pakman Show, March 22, 2017
The Joe Rogan Experience, March 27, 2017
Waking Up with Sam Harris, April 10, 2017
Hard Chat: Lawrence Krauss, May 17, 2017
ABC TV Q&A, May 22, 2017
The Weekly with Charlie Pickering, May 2017
Arizona Horizon: Science Matters, Monthly, 2012-

(g) Film

Documentary: *The Unbelievers* (2013)
Salt and Fire (2016)
Lo and Behold, Reveries of the Connected World (2016)
The Farthest (2017)

Major Research Areas and Activities:

Theoretical Particle Astrophysics and Cosmology, including studies of the early universe, neutrino astrophysics, dark matter, dark energy, quantum field theory and

General Relativity, gravitational waves, cosmic microwave background, black holes, stellar evolution, nucleosynthesis, eschatology.

Science and Society/Public Policy: Science Education, Science Writing, Public School Science Curricula, Science and Religion, Scientific Integrity in Government, Missile Defense, Nuclear Proliferation, Science and Pseudoscience

Related Professional Activities

1. Science Education:

I have maintained a strong interest in science education at all levels, and had extensive teaching experience—from a university level to lectures for the general public. While still a student I worked with the Ontario Science Center, giving public demonstrations, and training staff there. At M.I.T. I ran a live phone-in T.V. program on physics for undergraduates, and was nominated for a teaching award for instruction during a semester in which I received the highest teaching evaluation score in the undergraduate course guide. During that time I also taught a one-semester science course in the Cambridge public school system. At Yale, I taught courses ranging from a general physics course for non-scientists, to advanced graduate courses in particle physics, and in cosmology. I also served for two years on the Yale Course of Study committee, where I played a major role in revising the science requirements for undergraduates. In 1991 I was named a Sigma Xi National Lecturer, and visited campuses and industries around the country for two years giving public lectures. I also directed a 3-day seminar for the Association of Yale Alumni entitled *The Legacy of Newton*. In 2006 I was named a Phi Beta Kappa National Visiting Scholar, to be lecturing to Phi Beta Kappa Chapters around the country.

At CWRU I sponsored and/or organized outreach programs as well as lecturing to high school and public school students and teachers throughout Northeast Ohio, including visiting schools to lecture or talk to students about science, and participated in programs such as the Young Scholars Program, Science Olympiad, and served on the Executive Committee of the Board or Trustees of the Cleveland School for the Arts, where I initiated a science committee that still exists to enrich the science program at the school. In the physics department itself I supervised the overhauling of the undergraduate and graduate physics curricula, the establishment of new undergraduate laboratories, the creation of six new undergraduate major tracks, and one new graduate degree program, and the creation of a new public lecture series. I also brought together a group of faculty from science and the humanities to help establish the form the new Seminar Approach to General Education curriculum at Case.

I was involved in the preparation of a national curriculum on cosmology for high school teachers sponsored by the American Association of Physics Teachers, and presented a series of workshops for teachers based on a teaching manual I wrote. In 1999 I served as an outside adviser to MIT for their new program aimed at introducing writing and communication aspects across their science curriculum. I have also given presentations on teaching science at the National Teacher Training Institute, and at regional teachers meetings, and at the APS-AAPT national meeting in Columbus. I presented the opening lecture at the American Association of Physics Teachers meeting in San Antonio in 1999, and a Shell Lecture at the 2001 National Association of Science Teachers Conference in St. Louis.

In 2004, I was awarded the Oersted Medal by the AAPT, its highest recognition for teaching. I have also served on the executive committee of the board of trustees of the Great Lakes Science Center, the Board of the Cleveland Museum of Natural History, and the Board of the new Science Fiction Experience Museum in Seattle.

As various groups attempted to impede the teaching of evolution in public schools I quickly took a leadership role in combatting this effort. I helped lead the effort in Ohio during the period 2002-2006 to fight back an effort to alter the science standards and curricula in the public schools and spoke out in states such as Kansas and Colorado on this issue, as well as advising lawyers in Dover Pennsylvania during the trial there. In March 2002 I testified in a public presentation before the Ohio Board of Education on Science Standards for High School Science Classes in Ohio, beginning what became a national effort to defend the teaching of Evolution in high schools. In 2006 I created the organization Help Ohio Public Education, which recruited pro-science candidates for State School Board elections. All of our candidates were successfully elected.

3. Science, Society, and Public Policy:

My activism on issues of science and society began when I was still a student, when I served as an organizer and lecturer in California for the Union of Concerned Scientists Convocation against Nuclear War in 1981, and Regional Coordinator for the International Physicists Petition for a Nuclear Freeze. In 1987-88 I was a regional co-ordinator for the FAS Congressional Exchange Program, and then began writing and lecturing on issues associated with National Missile Defense. I served on the American Physical Society Panel on Public Affairs for two years. In February 2004, I was among a group of 62 prominent scientists that wrote a public statement regarding Scientific Integrity in Washington. I was on the Board of Scientists and Engineers for America, and the Board of Ohio Citizens for Science, and was Chair of the American Physical Society Forum on Physics and Society, Chair of the Physics Division of the American Association for the Advancement of Science. In 2008 I co-founded *ScienceDebate2008*, which has worked with and coordinated over 100 major science organizations to call for a Presidential Debate on issues of Science and Technology Policy, and following that, served on Barack Obama's Science Policy committee during the Presidential Campaign. In 2009 I was named Co-Chair of the Bulletin's Board of Sponsors and began embarking on a new set of activities designed to reduce the threat of nuclear war. During my tenure as Co-Chair, and since 2015, as Chair, the Bulletin has broadened its areas of interest, to include global climate change, biotechnology and other emerging technologies, and also AI and cyberterrorism.

I regularly write on science and policy issues for newspapers and magazines, including in such newspapers the New York Times, L.A. Times, the International New York Times, The Wall St. Journal, The Washington Post, and The Chronicle of Higher Education, as well as magazines including The New Yorker, Scientific American, Wired, Nautilus, New Scientist, Discover, Seed, and TV Guide. I have been a commentator for both Public Radio International, and National Public Radio, with commentaries airing on both Marketplace, and Morning Edition. I have also appeared on national television news programs, including CNN, PBS, ABC News, and Fox News, The Colbert Report, and Real Time With Bill Maher.

4. Popular Science books and films:

The popular science book I wrote in 1989 was named an Astronomy Book of the Year by the Astronomical Society of the Pacific (1990) and was been translated into 4

languages. My next book appeared in 1993, was named among the “best books of the year” by Library Journal, and was translated in 12 languages. My next book, *The Physics of Star Trek* became an international bestseller and appeared simultaneously in audio tape format in 1995, and was translated into twenty foreign languages, and sold over 250,000 copies in the US alone. My sixth book, *Atom*, appeared in April of 2001 and was awarded the American Institute of Physics Science Writing award. My book *Quantum Man: Richard Feynman’s Life in Science*, was named Book of the year 2011 by Physics World. My next book, *A Universe from Nothing* was an immediate New York Times bestseller, and has been translated into 25 languages. My most recent book *The Greatest Story Ever Told... So Far: Why are we here?* just appeared, in March of 2017. Most recently I have been involved in producing and appearing in film feature documentaries and theatrical films, including a film that followed myself and Richard Dawkins around the world, entitled *The Unbelievers*, the television series, *How the Universe Works*, and most recently a film about the Voyager spacecraft entitled *The Farthest*.

5. Educational and Administrative Leadership:

CWRU:

In 1993, I moved to Case Western Reserve University to become Chairman of the Physics Department in order to oversee a major revitalization of the department and its facilities, and also to help in launching the new College of Arts and Sciences. During the twelve years of my Chairmanship, we completed a six million dollar renovation of the Physics research and teaching facilities, hired nine outstanding new faculty, created a new nationally recognized research group in particle astrophysics with a strong theoretical group and new experimental programs ranging from dark matter detection to high energy gamma ray astrophysics, overhauled the undergraduate and graduate curricula, tripled the size of the sophomore class of physics majors (the make it the largest group per capita of any leading research university in the country), built and outfitted a new set of introductory physics laboratories which serviced over 600 undergraduates per year, created a new Engineering Physics major, a new Bachelor of Arts in Physics degree, a new BS in Mathematics and Physics, a new BS Physics degree with a concentration in Biophysics, and created two new prominent public lecture series. We also developed an exciting new Masters Program in Physics Entrepreneurship, which was used by the American Physical Society as a new model for graduate education in physics at a national level. I raised 1.5 Million dollars to initiate this program. Finally we created a new Center for Education and Research in Cosmology and Astrophysics at the University, in coordination with the Cleveland Museum of Natural History. The inaugural event sponsored by CERCA, and funded in part by the Kavli Foundation, was a conference on the Future of Cosmology, the first such conference sponsored by Kavli, creating a new conference series for them.

During my tenure as chair, the departmental college-funded operating budget increased by \$300,000 to over \$1 million/yr, and we obtained in excess of 5 million dollars in sponsored research funds per year, and I raised over \$8 million in privately funded endowments from outside donors. The sponsored external research funding for the department tripled during my tenure as chair. According to a national ranking of Ph. D. programs in Physics when I left, the department ranked 16th in the country, up from 108th before I became Chair.

At the College level I was heavily involved in various College and University projects, including fundraising, planning, and curricular issues. I took a leadership role in

visiting donors, lecturing to alumni groups, and preparing proposals for foundation support. I served on the President's committee overseeing a year-long self-study in 1995 associated with the successful re-accreditation of CWRU, focusing on different areas of University activity, including electronic learning, undergraduate education, research, and continuing education. I played a key role in helping shape the form of a new Seminar Approach to General Education that was instituted in 2005 for all undergraduates at CWRU. During the period 2005-7, I took a variety of different roles at the University, including helping to plan for the new West Quad Research Complex for the Medical School, Chairing an external Strategic Planning committee for the Dept. of Chemistry, and Chairing the Advisory Committee on Research Computing for the VP for Information Technology Services, and served on the University Stakeholders committee, appointed by the President to raise the University's profile locally and nationally.

Based on my interests in expanding the research profile of the University, I was asked to Chair a President's Commission on Graduate Education and Research, which examined ways to alter the University administrative structure and fundraising priorities in order to enhance the research and graduate education at CWRU. This commission produced a report in April of 2004, and on that basis, a new Research Council was established.

ASU:

In 2008, I moved to Arizona State University to direct a new University-wide Origins Project at ASU which has since become a nationally recognized center for sponsored meetings, education, and outreach on issues associated with Origins, including the origins of the universe, planetary origins, the origin of life, human origins, and origins of cognition, etc. The project began with of which was a major Origins Symposium held April 3-6, 2009, attended by over 80 major scientists and scholars from a host of fields around the world and 8 Nobel Laureates. Our inaugural public event involved 12 hours of lectures and panels and was attended by over 6000 members of the public, as well as being broadcast live on the web (see www.origins.asu.edu). One of the highlights involved an afternoon forum for students from 20 inner city high schools.

Since its inauguration, the Origins Project has achieved international prominence, hosting over 20 workshops on forefront issues with major scientists and scholars in a variety of fields, leading to white papers on Climate Change, a new research program in human origins, and a new concerted program on the implications of research in Artificial Intelligence. We have cosponsored events with groups ranging from the National Institutes of Health to the Sydney Opera House. Our public events regularly attract up to 3000 members of the public, and up to 2,000,000 people have viewed them online afterwards. Audience members have flown in from Japan, South America, and Canada, as well as across the country to listen to scholarly panels on issues ranging from the Origins of Morality, to the Nature of Gravity as well as dialogues with leading public intellectuals and including Noam Chomsky, Peter Singer, Alan Alda, Jeffrey Sachs, Frank Wilczek, and Johnny Depp. We have sponsored events that merge science and popular culture, including screening of major films by directors such as Werner Herzog, commissioning a dance program by Liz Lehrman entitled *A Matter of Origins*, and a performance of Holst's *The Planets* with the University Orchestra, followed by a public lecture by Stephen Hawking.

In addition to its scientific and outreach missions, the Origins Project has also developed an educational portal, in which we compile and curate material from our workshops in an online format that is accessible by teachers, students and members of the

general public. We have established three different undergraduate research scholarships and raised funds to establish the largest postdoctoral prize in the world, awarded annually to a postdoctoral research from any field of origins from around the world, who travels to the University and presents a series of lectures.

In order to develop and support the program I have raised over 3 million dollars in external funding as well as controlling a similar amount in University funding, with which I have hired and managed a staff of seven people including an Executive Director, Associated director, program manager, office manager, web designer, graphic designer and office assistant, as well as numerous interns and volunteers. We established an external advisory committee that includes major scientists, business leaders, and thought leaders from around the world, including 5 Nobel Laureates, the head of research at Microsoft, and the past president of the Royal Society.

The program has also been successful in bringing major figures to the University. Besides Visiting Origins Professors, who have included Ian McEwan, Peter Singer, Richard Dawkins, among others, two of our past visiting professors, Sidney Altman and Frank Wilczek, both Nobel Laureates, have now joined the University as faculty.

In addition to my leadership of the Origins Project, I joined the University with a mandate to build a new Cosmology Initiative at the University. As part of this initiative, we have hired 7 new faculty, and have a flourishing program that has brought in over 2 million/yr in external research funding to the University from the DOE, NSF, and NASA, among other agencies, as well as training over a dozen postdocs and a larger number of graduate students thus far.

6. History Research

While in my late teens and early 20's I pursued a research interest in Canadian History, including devoting one full year doing primary research at the Public Archives of Canada, Ontario, and a variety of private collections. During that time I was granted access to a variety of restricted materials from the files of the Attorney General of Ontario, to be used for a book on the social history of the depression in Canada. Also during this period I helped edit a book on the Hutterites in Canada.