

CURRICULUM VITAE of William D. Phillips,

Date of Birth: 5 November 1948

Place of Birth: Wilkes-Barre, Pennsylvania, USA

Citizenship: United States

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Education:

Camp Hill High School, Camp Hill, Pennsylvania,
diploma (Valedictorian) 1966.

Juniata College, Huntington, Pennsylvania, B.S., Physics, summa cum
laude, 1970.

Massachusetts Institute of Technology, Cambridge, Massachusetts,
Ph. D., Physics, 1976. Thesis under Prof. Daniel Kleppner, thesis
title: I. The Magnetic Moment of the Proton in H₂O;
II. Inelastic Collisions in Excited Na.

Scientific Experience after Ph.D:

1978-present: Physicist, National Bureau of Standards (Now National Institute for Standards and Technology); 1990-96: Group Leader of the Laser Cooled and Trapped Atoms Group of the Atomic Physics Division; 1996-98, NIST Fellow; 1998-present: NIST Fellow and Group Leader of the Laser Cooling and Trapping Group.

1989-1990: Visiting Professor at Ecole Normale Supérieure, Paris, in the laboratory of Claude Cohen-Tannoudji and Alain Aspect:

1976-1978 Chaim Weizmann Postdoctoral Fellow at Massachusetts Institute of Technology:

1992-2001: Adjunct Professor of Physics, University of Maryland, College Park.

2001-present: Distinguished University Professor, University of Maryland, College Park MD (on leave).

2002-2003 George Eastman Visiting Professor, Balliol College and Clarendon Laboratory, Department of Physics, University of Oxford

Awards and Honors:

Pennsylvania State Scholarship 1966-1970
C. C. Ellis Memorial Scholarship 1969-1970
Election to Juniata College Honor Society 1969.
Woodrow Wilson Fellow 1970
National Science Foundation Fellow 1970-1973
Chaim Weizmann Postdoctoral Fellow 1976-1978
Outstanding Young Scientist Award of the Maryland Academy of Sciences, 1982.
Scientific Achievement Award of the Washington Academy of Sciences, 1982
Silver Medal of the Department of Commerce, 1983
Samuel Wesley Stratton Award of the National Bureau of Standards, 1987
Arthur S. Flemming Award of the Washington Downtown Jaycees, 1988
Gold Medal of the Dept. of Commerce, 1993.
Election to American Academy of Arts and Sciences 1995
Election as a NIST Fellow, 1995
Michelson Medal of the Franklin Institute 1996
Distinguished Traveling Lecturer (APS-DLS) 1996-98
Election to the National Academy of Sciences 1997
Nobel Prize in Physics 1997

Nobel Prize Citation: “for development of methods to cool and trap atoms with laser light” The 1997 prize was shared with Steven Chu of Stanford University and Claude Cohen-Tannoudji of the Ecole Normale Supérieure, Paris.

Honorary Doctor of Science, Williams College 1998
Doctor Honoris Causa de la Universidad de Buenos Aires 1998
Arthur L. Schawlow Prize in Laser Science (APS) 1998
Honorary Doctor of Science, Juniata College 1999
American Academy of Achievement Award 1999
Gold Medal of the Pennsylvania Society 1999
Richtmeyer Award of the Am. Assoc. of Physics Teachers 2000
Election to the European Academy of Arts, Sciences and Humanities (titular member), 2000
Condon Award of NIST 2002
Archie Mahan Prize of the OSA
Election as an Honorary Freeman of the Worshipful Company of
Scientific Instrument Makers, London 2003
Election as an alumni member of Juniata College's chapter of Omicron Delta Kappa, the
National Leadership Honor Society 2004
Election as an Honorary Member of the Optical Society of America 2004
Appointed an Academician of the Pontifical Academy of Sciences 2004.
Presidential Rank Award, 2005
Service to America Award – Career Achievement - 2006

Professional societies:

American Physical Society (Fellow)
Optical Society of America (Fellow)
Fellow, American Academy of Arts and Sciences
National Academy of Sciences
Korean Academy of Science and Technology (foreign honorary member)
European Academy of Arts, Sciences and Humanities (titular member)
Sigma Xi Research Society
Society of Physics Students
Pontifical Academy of Sciences

Other professional activities:

Organizer and proceedings editor of Gaithersburg Conference on Laser Cooling and Trapping, 1983; Co-editor of Proceedings of Second International Conference on Precision Measurement and Fundamental Constants, 1984; Editorial board of Progress in Quantum Electronics 1984-1987; Program Committee of the International Laser Science Conference, 1986,87,88. North American organizer of Helsinki Summer School on Laser Cooling and trapping, 1986? ; Elected Fellow of APS, 1986; Visiting Professor at Collège de France, Paris, May-June 1987; Program Committee of IQEC-87; program committee of QELS-89; Member of the Committee on Fundamental Constants of the National Academy of Sciences; Member of the founding steering committees of the American Physical Society Laser Science Topical Group and on Precision Measurement and Fundamental Constants; US organizer of the 1990 US-Japan Seminar on Quantum Electronic Manipulation of Atoms and Fields; Visiting Professor at Ecole Normale Supérieure, 1989-1990; Lecturer at Trieste Winter school on High Resolution Spectroscopy, January 1990; Lecturer at Les Houches summer school on quantum electronics, July 1990; Co-Organizer of and lecturer at 1991 Enrico Fermi Summer School on Radiative Manipulation; vice chairman, Gordon Conference on Atomic Physics, 1991; Chair, OSA Optical Physics group 92-93; Chair, Gordon Conference on Atomic Physics 1993; Member of the Executive Committee, Laser Science Topical Group of APS (91-93); APS representative on Joint Council on Quantum Electronics, and International Council on Quantum Electronics (91-93); program committee of the 11th ICOLS 1993; Program committee of DAMOP 1993-95; OSA Meggers award committee, 1993; Program committee of OSA/ILS '94; ISF Physics Panel, 1994; elected fellow of OSA, 1994; 1994-1997, DAMOP publications committee; 1995- ,Editorial Board of Advances in Atomic, Molecular, and Optical Physics; elected fellow of the American Academy of Arts and Sciences, 1995; Lecturer at Enrico Fermi summer school on Coherence and Collective interactions of particles and radiation beams, 1995; Elected NIST Fellow, 1996; Distinguished Traveling Lecturer, APS-DLS 1996-98; visiting scientist, Institut d'Optique, Orsay France, 1996, Vice-Chair of the Division of Laser Science of APS, 1996-97, Russell Marker Lecturer at Penn State University, 1996; elected to National Academy of Sciences, 1997; Chair-elect of DLS, 1997-98. Lord Lecturer at MIT, 1998; Smith Lecturer at Ohio State University 1998; Chair of DLS, 1998-1999; Member of the NRC committee on the update of the FAMOS report, 1999-2001 ; Member of the NRC committee on Women in Science and Engineering, 2000-; Co-organizer of the 2000 Cargese Summer School on Bose Condensates and Atom Lasers; Lecturer at Enrico Fermi Summer Schools on Nanotechnology and Metrology, Varenna, Italy, 2000; Member of the Physics and Cosmology panel of “Science and the Spiritual Quest II” 2000-2002; Member of the NRC Committee on Women in Science and Engineering, 2000—2002;

Member of the 21st Century Temporary Nominating Group of the NAS, 2003-2005; Member of the NRC Committee on Atomic, Molecular and Optical Science 2003—; Program committee of ICAP-2004;