

**CURRICULUM VITAE of William D. Phillips,  
Updated: December 2016**

Date of Birth: 5 November 1948

Place of Birth: Wilkes-Barre, Pennsylvania, USA

Citizenship: United States

Business address: Joint Quantum Institute  
University of Maryland and National Institute of Standards and Technology  
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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 H<sub>2</sub>O;  
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.

2001-present: Distinguished University Professor, University of Maryland, College Park MD;

2006-present, College Park Professor, University of Maryland;  
Fellow of the Joint Quantum Institute (a joint venture of NIST and the University of Maryland).

2008-Present: Co-Director of the NSF Physics Frontier Center at the Joint Quantum Institute

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

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

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:

## **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 prize was shared with Steven Chu and Claude Cohen-Tannoudji.**  
Honorary Doctor of Science, Williams College 1998  
Doctorado 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 2002  
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  
Appointed an Academician of the Pontifical Academy of Sciences 2004  
Meritorious Senior Professional Award (Presidential Rank) 2005  
Trotter Prize 2006  
Service to America Medal, Career Achievement Award 2006  
Election as Honorary Member of the Institute of Physics of the University of Sao Paulo in Sao Carlos, Brazil, 2009

Janus Award of the Institute of Physics at the University of Sao Paulo in San Carlos,  
Brazil, 2009  
Doctorado Honoris Causa, Universidad Autónoma de San Luis Potosí, San Luis Potosí,  
Mexico, 2009  
Appointment to Lifetime Membership in Sigma Xi 2009  
Moyal Medal, Faculty of Science, Macquarie University, Sydney, 2010  
Doctorat *Honoris Causa*, École Normale Supérieure, Paris 2010  
Doctor of Science, *Honoris Causa*, University of Strathclyde, Glasgow, 2011  
NIST Equal Opportunity/Diversity Award 2011  
Doctor of Science, *Honoris Causa*, University of Oxford, 20 June 2012.  
Inaugural recipient of the "Wall of Honor" award of the Camp Hill (Pennsylvania) School  
District, 26 January 2013  
Pioneer in Photonics Award, Fitzpatrick Institute of Photonics, Duke University,  
11 March 2013  
Galileo Ferraris Prize, INRiM, Torino Italy, 06 December 2014  
Appointment as a Corresponding Member of the Mexican Academy of Sciences  
(Academia Mexicana de Ciencias) December 2016.

**Professional societies:**

American Physical Society (Fellow)

Optical Society of America (Fellow and Honorary Member)

American Academy of Arts and Sciences (Fellow)

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 (lifetime member)

Society of Physics Students

Pontifical Academy of Sciences