

Curriculum Vitae - Wolfgang Ketterle

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- Personal:** born on October 21, 1957 in Heidelberg, Germany, divorced, three children
German citizen, permanent residency in the U.S.
- Education:**
- Pre-diploma (Vordiplom), Physics, University of Heidelberg, Germany, 1978
 - Internship at Volkswagen company in Puebla, Mexico, 7/1980
 - Diploma (Diplom, equivalent of master's degree), Physics, Technical University of Munich, Germany, 1982. Theoretical diploma thesis on spin relaxation in disordered systems (Prof. W. Götze)
 - Ph.D., Physics, Ludwig-Maximilians University of Munich and Max-Planck Institute for Quantum Optics, Garching, Germany, 1986. Experimental Ph.D. thesis on spectroscopy of helium hydride and triatomic hydrogen (Prof. H. Walther)
- Employment, research:**
- 1982-88 Research assistant (1982-85) and staff scientist (1985-88), Max-Planck Institute for Quantum Optics, Garching, Germany (Prof. H. Walther)
- Field of research: Spectroscopy of small molecules in neutralized ion beams
 - Major scientific accomplishments: First observation of discrete spectra of HeH, complete analysis of the electronic structure of HeH, lifetime measurements of triatomic hydrogen, mass-selective spectroscopy on all stable isotopic variants of H₃, laser spectroscopy of high Rydberg states of H₃ and HeH, determination of the fundamental mode frequency ω_1 of H₃⁺
- 1989-90 Research scientist, University of Heidelberg, Germany, Department of Physical Chemistry (Prof. J. Wolfrum)
- Field of research: Combustion diagnostics with lasers
 - Work on a two-wavelength excimer laser, temperature field measurements using OH spectroscopy, laser diagnostics in a Diesel engine, determination of velocity fields
- 1990-93 Research associate, MIT, Cambridge, Department of Physics (Prof. D.E. Pritchard)
- Field of research: Atom cooling and trapping
 - Work on isotropic light slowing, dark spontaneous force light trap, intense slow atom beams
- since 1993 Faculty member, MIT, Cambridge, Department of Physics:
Assistant Professor of Physics (1993-97)
Professor of Physics (1997-98)
John D. MacArthur Professor of Physics (since 1998)
- General research area: atomic physics, laser spectroscopy, studies of ultracold gases
 - Techniques: laser cooling, magnetic trapping, evaporative cooling
 - Advance of atom optics: atom lasers, atom interferometry, atom chips
 - Studies of Bose-Einstein condensation and Fermi degeneracy
 - Exploration of new forms of matter, in particular novel aspects of superfluidity, coherence, and correlations in many-body systems

Honors: Fellowship of Studienstiftung des deutschen Volkes (1976-82)
NATO/DAAD Postdoctoral Fellowship (1990-91)
Michael and Philip Platzman Award (MIT, 1994)
David and Lucile Packard Fellowship (1996)
I.I. Rabi Prize of the American Physical Society (1997)
Gustav-Hertz Prize of the German Physical Society (1997)
Distinguished Traveling Lecturer of the Division of Laser Science of the
American Physical Society (1998-99)
Discover Magazine Award for Technological Innovation (1998)
Fritz London Prize in Low Temperature Physics (1999)
Dannie-Heineman Prize of the Academy of Sciences, Göttingen, Germany
(1999)
Benjamin Franklin Medal in Physics (2000)
Nobel Prize in Physics (2001, together with E.A. Cornell and C.E. Wieman)
Officer in the Order of Legion of Honour of France (2002)
Medal of Merit of the State of Baden-Württemberg (2002)
Knight Commander's Cross (Badge and Star) of the Order of Merit of the Federal
Republic of Germany (2002)
Killian Award (MIT, 2004)
Honorary Degree of Doctor of Science from Gustavus Adolphus College, St.
Peter (2005)
Honorary Degree of Doctor of Science from University of Connecticut (2007)
Honorary Degree of Doctor of Science from Ohio State University (2007)

Memberships:

American Physical Society (APS, Fellow, 1997)
German Physical Society (DPG)
Optical Society of America (OSA; Fellow 2006)
American Academy of Arts and Sciences (AAAS, Fellow, 1999)
European Academy of Sciences and Arts (2002)
Academy of Sciences in Heidelberg (2002)
Institute of Physics (IOP, Fellow, 2002)
National Academy of Sciences (foreign associate, 2002)
European Academy of Arts, Sciences and Humanities (titular member, 2002)
Bavarian Academy of Sciences (2003)
German Academy of Natural Scientists Leopoldina (2005)