Curriculum Vitae

Name: Heidi Fearn
Born: August 21, 1965, Sutton-in-Ashfield, Nottinghamshire, England.

Degrees:

BSc. (Hons) Theoretical Physics, University of Essex, Colchester, England, 1986.
PhD. Quantum Optics, supervisor Prof. R. Loudon (FRS), University of Essex, England, 1989.

Academic Positions:

University of Essex; Grad laboratory demonstrator, 1986-89.

Max-Planck Institute; Postdoctoral Research Assistant, July-August, 1989.

University of New Mexico; Postdoctoral Research Assistant, 1989-91.

University of Arizona; Visiting Scholar, 1989-91.
California State University Fullerton, Lecturer in Physics, tenure track 1991.
(Greencard 1992)
CSU Fullerton, Assistant Professor in Physics, 1992-1995.

CSU Fullerton, Associate Professor in Physics, 1995-2001

CSU Fullerton, Full Professor in Physics, 2001–present.

USAF academy Colorado Springs: Distinguished Visiting Professor of physics 1 Aug 2007 - 31 July 2008.

Teaching subjects:

Graduate Level:
quantum mechanics 555A & B, mathematical methods 510, mechanics 520, electromagnetism 530A &B, special topics 560T (atomic theory), statistical mechanics 516

Upper Division:
quantum mechanics 455, optics 411, classical mechanics 320, electrodynamics 330 and modern physics 340, advanced quantum mechanics (atomic theory) 476, statistical and thermodynamics 416 (can also teach 300, 310)

Lower Division:
optics with modern physics both theory 227 and lab 227L, electromagnetism 226 (have also stood in for 2 weeks mechanics theory 225 and lab 225L)

Recent Awards:

Consultant Los Alamos National Laboratory 1994-2005.
CSUF Outstanding faculty recognition for scholarship that results in the highest quality peer reviewed journal articles, 2000-01.
Difference-In-Pay leave from Fullerton at LANL, paid for by LANL Spring semester 2001.
I have not listed certificates of recognitions for CSUF student awards or LANL certificates of appreciation for help with their summer AMO schools over the last few years.
KITP Fellowship 2003-05 Santa Barbara CA.
Consultant CSU INTERTECH report summer 2003
CSUF, NSM service award; In recognition of outstanding service 2005–06.
Distinguished Professor of Physics (USAF) US Air Force academy Colorado Springs 2007–2008. Including at least one month summer salary, 2007.

Membership:

American Physical Society (APS), 1991-present.
American Association for the Advancement of Science (AAAS), 1998-present.
American Association of Physics Teachers (AAPT), 1998-present.
The Space Society, 1991-present.
The Planetary Society 1993–present.
Optical Society of America (OSA), 2006-present.

Biographical Directory Listings:

"APS speakers list" in physics 1991-present
"American Men and Women in Science", vol 2. p1225 (1995).
"Who's Who in Science and Engineering", Marquis (1995).
"American Men and Women in Science", vol 2. p1225 (1995-present).
"Who's Who in Science and Engineering¡/cite¿, Marquis (1995-). "Who's who in the West", Marquis (1997-). "Who's who in the world", Marquis (1997-). "2000 Outstanding Intellectuals of the 20th century", IBC (1999).
"2000 Outstanding scientists of the 20th century",IBC (1999), Nominated as "International woman of the year", 1999,2004,2005
"2001 Outstanding scientists of the 21st century", IBC (2001).
others not listed.

Referee for following Journals: IOP, APS

- Physics Review A,D,E
- Reviews of Modern Physics
- Physical Review Letters
- American Journal of Physics
- Journal of Modern Optics

- Journal of Physics A,B
- Optics Letters
- European Journal of Physics

Conferences/Invited Talks & Seminars for 2001-present:

- Los Alamos, invited 2 hour seminar July 2001, "Intro to quantum mechanics; and an introduction to the Unruh Davies effect".
- California State University Fullerton, Oct 10th 2001, "Dispersion relations and the speed of light"
- California State University Long Beach, Oct 22 2001, "Dispersion relations and the speed of light"
- California State University Sacramento, (APS speaker) Physics dept., Oct 3 2002, "Microscopic theory of reflection" and "Aharanov Bohm effect with optical analog".
- California State University Fullerton, physics dept. Oct 23rd "Microscopic theory of reflection".
- Oklahoma State University, physics dept. (APS speaker) "Microscopic theory of reflection" and "Aharanov Bohm effect" Aug 2002.
- **Workshop in Santa Barbara** for "Theorists at undergraduate institutions", "Aharanov Bohm effect", July 21-25th 2003.
- Cal Poly Pomona, Oct 31st 2003, "Quantum Eraser theory and Experiment".
- Oklahoma State University, (APS speaker) Dec 4th 2003, "Quantum eraser theory and experiment".
- I have been asked to give a series of **10 introductory lectures** at the CSU Fullerton campus Gerentology center (CLE) in Spring 04, on SuperString theory. Jan 23rd through April 12th 2004.
- Utah State University, April 20th 2004, Talk on Adaptive optics. Invited via APS womens speakers list.
- I have been asked to give a series of **5 introductory lectures** at the CSU Fullerton campus Gerentology center (CLE) in Spring 05, on Nanotechnology theory. Jan 12th through April 12th 2005.
- Introduction to Nanotechnology lecture, physics dept seminar Oct 2005.
- **Conference Snow Bird Utah**, Jan 2nd-6th 2006. Invited talk on "Causality and dispersion in real media".
- **Conference Russia**; Coherent control of the fundamental processes, in Optics and Xray optics: CCFP'06 Nizhny Novgorod June 29th - July 3rd. Invited talk on "Speed of light in vacuum; can signals go faster-than-c , Scharnhorst effect revisited".
- Deans Breakfast Lecture, Coyote Hills Golf Course, "Your Nanotechnology Future", May 2nd 2006.

- Physics dept seminar, "Can light signals go faster than c? Scharnhorst effect revisited." Sep 20th 2006.
- APS meeting Long Beach, "Can light signals travel faster-than-c in a vacuum?". Oct 26 2006.
- Invited (APS speakers list) CSU Northridge to give a talk on the "Aharanov Bohm effect and optical analog", Nov 1st 2006.
- Invited Speaker (APS speakers list) University of Oregon, Oregon Center for Optics, Eugene Oregon, Dec 4th 2006. "Speed of light in vacuum; can signals go faster-than-c , Scharnhorst effect revisited".
- Invited Speaker (APS speakers list) Reed University, Portland Oregon, Dec 6th 2006.

For more information see my webpage at:
http://physics.fullerton.edu/∼heidi