

VITA: *Saeqa Dil Vrtilek*

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Education:

Massachusetts Institute of Technology	Physics	BS 1975
Brandeis University	Physics	MA 1979
Columbia University	Astronomy	PhD,MPhil 1985

General Fields of Investigation and Interest:

Physics of accretion disks, multiwavelength studies of X-ray binaries, planetary nebulae, and symbiotic binaries. History of Science. Science education. Public outreach.

Professional Experience:

1995-1996 Visiting Associate Professor of Astronomy, Harvard University
1995-1998 SAO ROSAT Science Data Center (30% FTE)
1993-1995 Visiting Associate Professor of Astronomy, University of Maryland
Spring 1990 MPE Fellow, Max-Planck Institute for Extraterrestrial Physics.
1989- Astrophysicist, Smithsonian Astrophysical Observatory
1988- Associate, Harvard College Observatory
1988-1989 Bunting Science Fellow, Radcliffe Bunting Institute
1986-1988 National Academy of Science/National Research Council Research Associate at NASA/GSFC.
Fall 1983 Visiting Scientist, Department of Astronomy, Oxford University
1983 Summer Faculty, Department of Astronomy, Columbia University
1979-1982 Programmer, Radio and GeoAstronomy Division, SAO
1979 Sponsored Research Staff, Center for Space Research, MIT
1975-1977 Research Assistant, Earth and Planetary Physics, Harvard University

Special Appointments:

2009-2012 Member, American Physical Society, Committee on the Status of Women in Physics
2005-2007 Director, SAO Research Experiences for Undergraduates and Teachers Programs
2003-2004 Chair, Center for Astrophysics Fellowship Selection Committee
2003-2004 Chair, SAO Pre-doctoral Research Oversight Committee
2001-2003 Member, CfA post and pre-doctoral selection committees.
1997-2009 Secretary for Astronomy, American Association for the Advancement of Science (AAAS)
1995-1997 American Astronomical Society (AAS) representative to the AAAS
1995 AAS High Energy Astrophysics Division Nominating Committee
1994 Astronomy Advisory Committee, UMd (design of 10-year strategic plan)
1993-1995 Astronomy Department Representative, UMd Outreach Program
1991-1993 Co-chair, CfA Colloquium Series
1990-1992 Coordinator, SAO Women's Program, CfA

Other Professional Experience:

I have over 80 publications in refereed journals with over 1500 citations listed in the NASA Abstract Data System and I have presented papers at over 60 professional meetings.

Since 1987 I have written 31 successful proposals bringing over \$2 million in grants.

Since 1991 I have served on 30 proposal reviews for NASA, NSF, and DOE both as chair and as panel member including a NASA Senior Review (1998), and a NASA Mission Concepts Review (1995).

Since 1988 I have acted as referee for several professional journals including: *Astrophysical Journal*, *Nature*, *Publications of the Astronomical Society of the Pacific*, *Monthly Notices of the Royal Astronomical Society*, *Astronomy & Astrophysics*, and *Astronomical Journal*.

Since 1983 I have been guest observer at several space-borne and ground-based observatories including: *Einstein* Observatory; EXOSAT; Kitt Peak National Observatory; International Ultraviolet Explorer; ROSAT; Whipple Observatory; Extreme Ultraviolet Explorer; ASCA; Hubble Space Telescope; X-ray Timing Explorer, Chandra X-ray Observatory; XMM, and Magellan.

Honors/Awards:

NASA group achievement awards...

2005-2006 Shapley Lecturer, American Astronomical Society

1993-1996 Visiting Professorship for Women, National Science Foundation

1991-1992 Marie Curie Fellow, American Association of University Women

1988-1989 Science Scholar, Bunting Institute, Radcliffe College

1983-1985 Amelia Earhart Fellow, Zonta International

Professional Societies:

2001- Astronomical Society of the Pacific

1994- American Association for the Advancement of Science

1991- International Astronomical Union

1991- American Association of University Women

1986-1990 New York Academy of Sciences

1984-1991 Royal Astronomical Society

1984- American Physical Society

1982- American Astronomical Society

Responsibility for Meetings/Scientific Conferences:

1996 "All Eyes on the Universe: Multiwavelength Astrophysics" organizer, scientific session for the AAAS Annual Meeting, Baltimore, Maryland February 8-13, 1996.

1997 "Taking the Pulse of the Universe: The First Year of Results from the Rossi X-ray Timing Explorer" co-organizer, scientific session for the AAAS Annual Meeting in Seattle, Washington February 13-18, 1997.

1999 "New Views of the Invisible Universe: First Light from Chandra" co-organizer, co-organizer, scientific session for the AAAS Annual Meeting, Washington, DC, Feb. 17-22, 2000.

2001 "The X-ray Universe at Sharp Focus", Scientific Organizing Committee, July 16-18, 2001, St. Paul, MN. Co-editor (with Eric Schlegel) of proceedings: ASP Conference Series Vol. 262.

2001 "Women of Science: Shattering the Glass Ceiling" organizer, session for the AAAS Annual Meeting, Boston, Feb 14-19, 2002.

2001 "X-ray Timing 2003: Rossi and Beyond", Scientific Organizing Committee, Nov 3-5, 2003, Cambridge MA

2005 "Astrotomography: New Techniques for Imaging Objects in Space. co-organizer of symposium for the AAAS Annual Meeting, Washington, DC, Feb. 19, 2005.

2006 "NASA's Great Space Observatories: Challenges and Rewards" organizer of symposium for the AAAS Annual Meeting, St. Louis, MO, February 19, 2006.

2006 "Astronomy Nexus" organizer of networking event at AAAS Annual Meeting, St. Louis, MO, February 19, 2006.

2009 “How Telescopes made the Earth a planet: 400 years after Galileo” co-organizer and moderator, AAAS Annual Meeting, Chicago, IL, February 14, 2009

Educational Activities:

I have taught both undergraduate and graduate courses in Astronomy and Astrophysics at the University of Maryland, Harvard University, and undergraduate courses at Northeastern University.

I have supervised three postdoctoral fellows (one at Maryland and two at SAO) and five 2nd year projects for graduate students (three at Maryland and two at Harvard).

In the past five years I have worked with several undergraduate interns (including women and minorities: Michael Preciado, Holly Maness, Serena Eley, Joey Neilsen, Amy Leblang, Hannah Quaintrell, and Adrienne Hunacek). Work has resulted in several published papers and meeting presentations for the students.

Public Outreach:

I have participated in several programs to introduce a broader public to science, and especially to encourage primary and secondary school students to consider careers in science.

I have presented public lectures for ZONTA International, the Radcliffe Bunting Institute, the Harvard-Smithsonian Center for Astrophysics, the American Council on Education (located in Washington DC), and the Harvard Summer School. I have also given numerous talks on my work at middle and high schools in Massachusetts, Maryland, and Virginia.

In 2006 I served as Judge for FIRST (For Inspiration and Recognition of Science and Technology) Robotics Regionals in Boston, MA March 23-25, 2006.

Since 2001 I have participated in a scientist-to-student collaboration with Nashoba Brooks. An all girls school matching women scientists with students.

From 1996-2006 I organized 7 sessions aimed at general audiences at AAAS annual meetings.

In 1995 I organized a symposium for High School women and minorities on Careers in the Physical Sciences and Engineering at the University of Maryland that took place on March 11, 1995. 25 speakers and panel members (including then NASA Chief Scientist France Cordova, the Deans for Undergraduate Studies and the College of Science, and professors and scientists from the University of Maryland, Goddard Space Flight Center, NSF, and the Space Telescope Science Institute) gave talks on their experiences in pursuing science and science-related careers.

In 1992, in collaboration with the Women's Program Committee at the CfA I organized a workshop on Astronomy for high school women held on May 16, 1992.

During the summers of 1991 and 1992 I organized a series of colloquia (called "Summer Stars") at the CfA that were primarily aimed for an undergraduate audience; the undergraduate lecture series is continued by the Women's Program Committee.

For two years (1990-1991) I was a member of Science-By-Mail, a program organized by the Boston Museum of Science which teams scientists with elementary school students to conduct "experiments" throughout the school year.

Community Service:

2005- Member, Board of Directors, Cambridge Revels, <http://www.revels.org/>

2001-2004 Member, Board of Directors, Cambridge CitySprouts, <http://www.citysprouts.org/>

Citizenship:

US