

CURRICULUM VITAE
J. Patrick Miller

EDUCATION

<u>Year</u>	<u>Institution</u>	<u>Degree</u>
1967-69	Eastern New Mexico University	Undergraduate Study
1969-72	University of New Mexico	BS Mathematics BS Astrophysics
1972-74	University of New Mexico	MA Mathematics
1974-75	University of New Mexico	PhD Study Mathematics
1975-78	University of California (Los Angeles)	PhD Study Mathematics
2004-08	James Cook University	DSc Astronomy

EMPLOYMENT

<u>Year</u>	<u>Institution</u>	<u>Position</u>
1972-75	Mathematics Department University of New Mexico Albuquerque, NM	Teaching Assistant
1975-78	Mathematics Department University of California Los Angeles, CA	Teaching Assistant
1979-84	Mathematics Department University of New Mexico Albuquerque, NM	Lecturer II
1983-86	Science Applications International Albuquerque, NM	Staff Scientist Computer Applications
1986-87	E-Systems, Inc. Garland, TX	Staff Scientist Computer Applicatios
1987-88	Science Place Fair Park Dallas, TX	Education Director

1987-99	Mathematics Department University of Texas at Dallas Dallas, TX	Adjunct Faculty Mathematics
1988-99	Science & Mathematics Division Brookhaven College Farmers Branch, TX	Dean
1999-05	Mathematics Department Abilene Education Center Cisco Junior College Abilene, TX	Professor Mathematics & Astronomy
2001-05	Mathematics Department Physics & Chemistry Department Hardin-Simmons University Abilene, TX	Adjunct Faculty Mathematics & Astronomy
2005-	Mathematics Department Hardin-Simmons University Abilene, TX	Full Professor Mathematics & Astronomy
2009-2012	Centre for Astronomy James Cook University Townsville, Australia	PhD Advisor (Astronomy)
2012-Present	Physics Department Abilene Education Center Cisco College Abilene, TX	Adjunct Faculty
2012-Present	Physics & Physical Sciences University of Southern Queensland Toowoomba, Australia	PhD Advisor (Astronomy)
2014-Present	Physics & Astronomy Department Al Akhawayn University Ifrane, Morocco	Guest Professor
2016-Present	Physics & Astronomy Department Jackson State University Jackson, MS	Adjunct Faculty

PROFESSIONAL MEMBERSHIPS

Member (1973-Present)
National Association of Rocketry

Member (1976-2000)
Board of Trustees
National Association of Rocketry

President (1978-94)
National Association of Rocketry

Member (1988-2012)
Committee on Pyrotechnics
National Fire Protection Association

Chairman (1995-2012)
Working Group on Rocketry
Committee on Pyrotechnics
National Fire Protection Association

Member (1979-86)
New Mexico Society for the Gifted & Talented

Vice-President (1985-86)
New Mexico Society for the Gifted & Talented

Member (2006-Present)
Texas Academy of Science

Chairman
Physics Section (2011-2014)
Texas Academy of Science

Member (2011-Present)
American Astronomical Society

Member (2011-President)
Member of the Division of Planetary Science
American Astronomical Society

HONORS & AWARDS

Summa Cum Laude (1972)
Phi Beta Kappa
Phi Kappa Phi

Graduate Student of the Year (1977)
University of California, Los Angeles

Diploma of Gagarin (1988)
Cosmonautic Federation of the Soviet Union

Galloway Service Award (1994)
National Association of Rocketry

Arête Certificate of Recognition (2001)
Abilene Education Council

Stine Lifetime Achievement Award (2003)
National Association of Rocketry

Main Belt Asteroid #4984, "Patrick Miller" (2012)
Minor Planet Center
International Astronomical Union

Co-Discoverer Supernova 2006 bi
International Astronomical Union

PROFESSIONAL PUBLICATIONS & PRESENTATIONS

Miller, J.P., Fetters, J., West, K., & Frazee, P. 2002, "Summer Program in Planetary Science and Astronomy for Gifted & Talented High School Students," *Proceedings of the 33rd Lunar & Planetary Science Conference*, 33, 1002.

Miller, J.P. 2004, "Use of Blackboard in Introductory Astronomy (Online, Hybrid)," *Proceedings of the Cosmos in the Classroom 2004*.

Holmes, R.E., Devore, H., & Miller, J.P. 2006, "The Astronomical Research Institute's National Supernova Search Program for Amateurs," *The Citizen Scientist*, 16 June 2006.

Pennypacker, C.R., Miller, J.P., & Canaday, M. 2006, "Search for Asteroids & Kuiper Belt Objects: A National Research Program for High School & College Students," *Proceedings of the 37th Lunar & Planetary Science Conference*, 37, 1010.

Miller, J.P., Pennypacker, C.R., & White, G.L. 2006, "Image Processing for Educators in Global Hands-On Universe," *Proceedings 26th IAU Meeting: Innovation in Teaching & Learning Astronomy Methods Session*, 2, 44.

Miller, J.P. 2006, "Estimating Distances of Asteroids: Using the Worldwide Internet-Accessible Network of Telescopes," *Proceedings of the Global Hands-On Universe 2006 (Provence, France)*.

Miller, J.P., Pennypacker, C.R., & White, G.L. 2006, "Alard Subtraction of Astronomical Images: Used by Students in Global Hands-On Universe," *Proceedings of the Global Hands-On Universe 2006 (Provence, France)*.

Miller, J.P., Pennypacker, C.R., & White, G.L. 2006, "Image Processing for Educators in Global Hands-On Universe," *Innovation in Teaching & Learning Astronomy Methods*, 26th Meeting of the IAU, (Prague, Czech Republic).

Miller, J.P., Davis, J.W., Pennypacker, C.R., & White, G.L. 2007, "International Asteroid Search Campaign: Internet-Based Asteroid Search Program for High Schools & Colleges," *The Citizen Scientist*, 4 May 2007.

Miller, J.P., Davis, J.W., Pennypacker, C.R., & White, G.L. 2007, "Asteroid Search Campaign: A Pilot Program for High School & College Students," *Proceedings of the 38th Lunar & Planetary Science Conference*, 38, 1003.

Miller, J.P., Davis, J.W., Pennypacker, C.R., & White, G.L. 2007, "Internet-Based Asteroid Search Project for High School & College Students," *Proceedings 110th Annual Meeting of the Texas Academy of Science*, 110, 92.

Miller, J.P., "Annual IASC Update: An Online Discovery Program in Astronomy," *Proceedings of the Annual Meeting of the Texas Academy of Science (2008, 2010, 2012)*.

Pennypacker, C.R., Gould, A., Hoette, V., & Miller, J.P. 2007, "Steady Progress on United States Hands-On Universe," *Proceedings of Global Hands-On Universe 2007 (Tokyo, Japan)*.

Miller, J.P., Davis, J.W., Holmes, R.E., et al. 2008, "An International Asteroid Search Campaign: Internet-Based Hands-On Research Program for High Schools & Colleges in Collaboration with the Hands-On Universe Project," *Astronomy Education Review*, 7, 1.

Miller, J.P., Pennypacker, C.R., & White, G.L. 2008, "Optimal Image Subtraction Method: Summary Derivations, Applications, & Publicly-Shared Application Using IDL," *Publications of the Astronomical Society of the Pacific*, 120, 866, pp. 449-464.

Miller, J.P. 2008, "A Method for Optimal Image Subtraction: Development of Mathematics & Software for General Use in Astronomical Research," *Doctoral Dissertation*, James Cook University (Townsville, Australia).

Miller, J.P., "IASC: An Online Discovery Program in Astronomy," *Proceedings of Global Hands-On Universe 2008 (Lisbon, Portugal)*.

Miller, J.P., "Annual IASC Update: An Online Discovery Program in Astronomy," *Proceedings of Global Hands-On Universe (2009 Porto Alegre, Brazil; 2010 Garching,*

Germany; 2011 Yerkes Observatory, United States; 2012 Ifrane, Morocco; 2013 Volos, Greece).

Miller, J.P., "Annual IASC Update: An Online Discovery Program in Astronomy," *Proceedings of the Hands-On Universe, Yerkes Observatory (2006, 2007, 2008, 2009 2010, 2012)*.

Pennypacker, C.R. & Miller, J.P. 2009, "International Astronomical Search Collaboration: An Online Student-Based Discovery Program in Astronomy (Invited)," *American Geophysical Union, Fall Meeting (San Francisco, CA)*.

Shang, K., Miller, J.P., Pennypacker, C.R., & Keohane, J.W. 2010, "International Asteroid Search Campaign (IASC) in Beijing High Schools," *Bulletin of the American Astronomical Society*, 42, p. 510.

Burgett, W.S. & Miller, J.P. 2011, "The First Pan-STARRS Asteroid Search Campaign: Astronomical Discovery Program for High Schools Students," *Bulletin of the American Astronomical Society*, 43, 2011

Hartung, S., Shulka, H., Miller, J.P., & Pennypacker, C.R. 2012, "GPU Acceleration of Image Convolution using Spatially-varying Kernel," *Proceedings of the 2012 IEEE International Conference on Image Processing*, pp 1685-1688.

Miller, J.P., Roche, P., Tripp, A., et al. 2012, "Comet P/2012 T7 (Vorobjov)," *Central Bureau Electronic Telegrams*, 3260, 2.

Newton, T., Puckett, T., Koff, R.A., Miller, J.P., et al, 2012, "Supernova 2012B in Pgc 13981 = Psn J03513452+3704427," *Central Bureau Electronic Telegrams*, 2978, 1.

Miller, J.P. 2012, "International Astronomical Search Collaboration -- Astronomical Discovery Program for High School & College Students." *American Astronomical Society, AAS Meeting*, 219, 431.04.

McNaught, R.H., Sato, H., Hill, R.E., Buzzi, L., Miller, J.P., et al. 2013, "Comet C/2013 E1 (McNaught)," *Central Bureau Electronic Telegrams*, 3435, 1.

Parker, S., Brimacombe, J., Miller, J.P., et al. 2013 "Supernova 2013fy in ESO 287-G40 = Psn J21372712-4701548," *Central Bureau Electronic Telegrams*, 3687, 1.

Burgett, W.S. & Miller, J.P. 2013, "Expanding and Evolving the International Astronomical Search Collaboration and Pan-STARRS Student Asteroid Search Program," *American Astronomical Society, AAS Meeting*, 221, 211.03.

Miller, J.P. & Pennypacker, C.R. 2013, "International Astronomical Search Collaboration: Online Discovery Program in Astronomy for High School & College

Students,” *Proceedings of the International Teacher-Scientist Partnership Conference*, American Association for the Advancement of Science (Boston, MA).

Miller, J.P. 2013, “International Astronomical Search Collaboration: Online Discovery Program in Astronomy for High School & College Students,” *Bulletin of the American Physical Society*. 80th Annual Meeting of the APS Southeastern Section, 58, 17.

Miller, J.P. 2013, “International Astronomical Search Collaboration,” *National Conference on Science Education & Public Outreach*, Astronomical Society of the Pacific (Tucson, AZ).

Sybiryakova, Y., et al. 2014 “Observations & Orbits of Comets”, *Minor Planet Electronic Circulars*, 2014-S125.

Sybiryakova, Y., et al. 2014 “Observations & Orbits of Comets”, *Minor Planet Electronic Circulars*, 2014-R69.

Miller, J.P. 2014, “Student Asteroid Discovery in Brazil,” *Proceedings of the 7th International Meeting of Astronomy & Astronautics*, Campos dos Goytacazes (Brazil).

Zielinski, L.F. & Miller, J.P. 2014, “From Space to School,” *Sky & Telescope*, June 2014.

Miller, J.P. 2014, “Student Discovery in Astronomy,” *President’s Lecture (Invited)*, Alakhawayn University (Ifrane, Morocco).

Miller, J.P. 2015, “Developments in the International Astronomical Search Collaboration,” *Proceedings of the 8th International Meeting of Astronomy & Astronautics*, Campos dos Goytacazes (Brazil).

Miller, J.P. 2015, “Annual IASC Update: An Online Discovery Program in Astronomy,” *Proceedings of the Hands-On Universe, Yerkes Observatory*.

Miller, J.P. 2015, “Annual IASC Update: An Online Discovery Program in Astronomy,” *Proceedings for the Global Hands-On Universe (Institute for Astronomy, University of Hawaii)*.

Note: >20 *Central Bureau Electronic Telegrams* co-author references 2010-2016.
>20 *Minor Planet Electronic Circulars* co-author references 2010-2016.