

VITA

David Jewitt

Address

Dept. Earth, Planetary and Space Sciences, UCLA
595 Charles Young Drive East, Box 951567
Los Angeles, CA 90095-1567

jewitt@ucla.edu, <http://www2.ess.ucla.edu/~jewitt/>

Education

B. Sc.	University College London	1979
M. S.	California Institute of Technology	1980
Ph. D.	California Institute of Technology	1983

Professional Experience

Summer Student	Royal Greenwich Observatory	1978
Anthony Fellowship	California Institute of Technology	1979-1980
Research Assistant	California Institute of Technology	1980-1983
Assistant Professor	Massachusetts Institute of Technology	1983-1988
Associate Professor and Astronomer	University of Hawaii	1988-1993
Professor and Astronomer	University of Hawaii	1993-2009
Professor	Dept. Earth, Planetary & Space Sciences, UCLA	2009-
	Inst. of Geophys & Planetary Physics, UCLA	2009-2011
	Dept. Physics & Astronomy, UCLA	2010-
Director	Institute for Planets & Exoplanets, UCLA,	2011-

Honors

Regent's Medal, University of Hawaii	1994
Scientist of the Year, ARCS	1996
Exceptional Scientific Achievement Award, NASA	1996
Fellow of University College London	1998
Fellow of the American Academy of Arts and Sciences	2005
Fellow of the American Association for the Advancement of Science	2005
Member of the National Academy of Sciences	2005
National Observatory, Chinese Academy of Sciences, Honorary Professor	2006-2011
National Central University, Taiwan, Adjunct Professor	2007
The Shaw Prize for Astronomy	2012
The Kavli Prize for Astrophysics	2012
Foreign Member, Norwegian Academy of Sciences & Letters	2012

Research Interests

Solar System Formation, Trans-Neptunian solar system
Physical properties of comets and cometary dust
Comet - asteroid interrelations, Centaurs, irregular satellites, Trojans, Active Asteroids
Submillimeter properties of comets & young stars

Recent Professional Service

A) External Committees

- NASA Subkilometer Asteroid Threat Science Definition Team, 2002-2003
- Cambridge Planetary Science Series Editor, 2003-present
- Editorial Committee, Annual Reviews of Astronomy and Astrophysics, 2005-2008
- NAS/NRC "Review of NEO Surveys and Hazard Mitigation Strategies", 2008-2009
- NASA SOFIA TAC Chair (Planets and Star Formation), 2010
- ESO Solar System Beyond Neptune Workshop, Science Committee 2017 - 2018

B) Internal Committees

- EPSS Public Outreach Committee, Chair 2013 - 2017
- Dean search committee, 2016

C) Education and Public Outreach

- EPSS 9: Solar System & Planets, 298A: Intro to Earth & Space, 264: Order of Magnitude Planetary Science, 200D: Planetary Surfaces, 15: Oceanography
- Popular Articles written for Scientific American, Physics World, Sky & Telescope
- Contributor to TV and radio documentaries (BBC, NHK Tokyo, Xinhua, PBS)
- Saas Fee Lecturer: Comets and Trans-Neptunian Objects, Mürren, Switzerland, 2005.
- Lecturer at Kobe Winter School in Planetary Science, Kobe, Japan, 2006.
- Vanderbilt Seyfert Lecturer, 2010; (3 lectures)
- Gold Lecturer, Cornell, 2013; Outer Solar System and Main-Belt Comets (4 lectures)
- University of Toronto Planet Day lecturer 2017
- <http://www2.ess.ucla.edu/~jewitt/kb.html> (million+ hits)

Graduate Student Advisees

- *Karen Meech*, BA 1981 (Rice Univ.), PhD 1988 (MIT), "Activity in Distant Comets". First position: Postdoc at Univ. Hawaii. Now Professor at Univ. Hawaii.
- *Jane Luu*, BS 1984 (Stanford Univ.), PhD 1992 (MIT), "Physical Studies of Primitive Solar System Bodies". First position: Harvard-Smithsonian Postdoc, Professor at University of Leiden now Senior Scientist at Lincoln Laboratory, MIT.
- *Matthew Senay*, AB 1983 (St. Louis Univ.), PhD 1997 (UH), "Sources of Activity in Distant Comets ", First position: U. Mass. Amherst.
- *Paul Kalas* BS 1989 (Univ. Michigan), PhD 1997 (UH), "A Coronagraphic Survey for Circumstellar Disks around Main Sequence and Pre-main Sequence Stars ", First position: Postdoc at Max Planck Institute for Astronomy, Heidelberg. Now Astronomer at U. C. Berkeley
- *Jun Chen*, BS 1990 (Peking University), PhD 1997 (UH). "A search for Trojan asteroids". First position: Software engineer, NETdelivery Corporation, Boulder. Now unknown.
- *Chadwick Trujillo* BS 1995 (MIT), PhD 2000 (UH). "Bright Objects in the outer Solar System". First position: Postdoc, Dept. Geological and Planetary Sciences, Caltech. Now Professor Northern Arizona University.
- *Daniel Potter*, BS 1994 (Univ. Colorado), PhD 2003 (UH). "A search for debris disks with a dual channel adaptive optics imaging polarimeter". First position: Postdoc at Steward Observatory, Univ. Arizona.

- *Scott Sheppard*, BS 1998 (Oberlin College), PhD 2004 (UH). "The Jovian System: from satellites to Trojans to Jupiter family comets". First position: Hubble Postdoctoral Fellowship at Carnegie/DTM. Now permanent staff at DTM.
- *Henry Hsieh*, BA 2000 (Harvard), MS 2003 (UH). "Comets Amongst the Asteroids: Icy Planetsimals in the Inner Solar System". PhD 2007. Now Researcher, Planetary Science Institute.
- *Bin Yang*, BS 2000 (Beijing Normal University), MS 2003 (National Astronomical Observatory of China). "Probing Water in Small Bodies". PhD 2009. Now ESO Scientist, Chile
- *Rachel Stevenson*, MSc 2006 (University College London). "Holmes and Hydration". PhD 2012. First position NASA Postdoc at JPL.
- *Man-To Hui*, BSc 2013 (Wuhan University). Currently PhD student.
- *Ariel Graykowski*, BS 2015 (University of California at Davis). Currently PhD student.
- *Dave Milewski*, BS 2013 (University of California at Los Angeles). Currently PhD student.

Recent Postdoctoral Advisees

- *Michal Drahus*, now postdoc at Jagellonian University, Krakow
- *Aurelie Guilbert-Lepoutre* (was Herschel Fellow), now Assistant Prof. CNRS
- *Hilke Schlichting* (was Hubble Fellow), now Assoc. Prof. at UCLA

Refereed Publications (invited papers in **bold** font)

- D. C. Jewitt, G. E. Danielson and S. P. Synott (1979), "Discovery of a New Jupiter Satellite", *Science*, 206, 951.
- D. C. Jewitt and G. E. Danielson (1981), "The Jovian Ring", *Journal of Geophysical Research*, 86, 8691.
- G. Neugebauer, E. E. Becklin, D. C. Jewitt, R. J. Terrile and G. E. Danielson (1981), "Spectra of the Jovian Rings and Amalthea", *Astronomical Journal*, 86, 607.
- D. C. Jewitt, R. J. Terrile and G. E. Danielson (1981), "Ground Based Observations of the Jovian Rings and Amalthea", *Icarus*, 48, 536.
- D. C. Jewitt (1982), "**The Ring of Jupiter**", in *Satellites of Jupiter*, ed. by D. Morrison, University of Arizona Press, Tucson.
- D. C. Jewitt, P. N. Kupferman, G. E. Danielson and S. P. Maran (1982), "Distribution of Forbidden Neutral Carbon Emission in the Ring Nebula (NGC 6720)", *Astrophysical Journal*, 268, 683.
- D. C. Jewitt, B. T. Soifer, G. Neugebauer, K. Matthews, and G. E. Danielson (1982), "Visual and Infrared Observations of the Distant Comets P/Stephan-Oterma, Panther and Bowell", *Astronomical Journal*, 87, 1854.
- D. C. Jewitt (1984), "Coma Expansion and Photometry of Comet Bowell", *Icarus*, 60, 373.
- D. C. Jewitt and G. E. Danielson (1984), "Charge Coupled Device Photometry of Comet P/Halley", *Icarus*, 60, 435.
- R. Remillard and D. C. Jewitt (1985), "A Comparison of the Continuum Spectra of Four Comets", *Icarus*, 64, 27.
- D. C. Jewitt and K. J. Meech (1985), "Rotation of the Nucleus of Comet P/Arend-Rigaux", *Icarus*, 64, 329.
- D. C. Jewitt, G. E. Danielson and P. N. Kupferman (1986), "Halos Around Planetary Nebulae", *Astrophysical Journal*, 302, 727.
- K. J. Meech, D. C. Jewitt and G. R. Ricker (1986), "Early Photometry of Comet P/Halley: Development of the Coma", *Icarus*, 66, 561.
- D. C. Jewitt and K. J. Meech (1986), "Cometary Grain Scattering Versus Wavelength or What Color is Comet Dust?", *Astrophysical Journal*, 310, 937.

- D. C. Jewitt and K. J. Meech (1987), "CCD Photometry of Comet P/Encke", *Astronomical Journal*, 93, 1542.
- D. C. Jewitt and K. J. Meech (1987), "Surface Brightness Profiles of Ten Comets", *Astrophysical Journal*, 317, 992.
- K. J. Meech and D. C. Jewitt (1987), "Comet Bowell at Record Heliocentric Distance", *Nature*, 328, 506.
- K. J. Meech and D. C. Jewitt (1987), "Observations of Comet P/Halley at Minimum Phase Angle", *Astron. & Astrophys.*, 187, 585 - 593.
- D. C. Jewitt and K. J. Meech (1988), "Optical Properties of Cometary Nuclei and a Preliminary Comparison with Asteroids", *Astrophysical Journal*, 328, 974-986.
- J. X. Luu and D. C. Jewitt (1988), "A Two Part Search for Slow Moving Objects", *Astronomical Journal*, 95, 1256-1262.
- D. C. Jewitt and K. J. Meech (1988), "Absence of a Color - Distance Trend in Comets", *Astronomical Journal*, 96, 1723-1730.
- D. C. Jewitt and J. X. Luu (1989), "A CCD Portrait of Comet P/Tempel 2", *Astronomical Journal*, 97, 1766 - 1790.
- J. X. Luu and D. C. Jewitt (1989), "On the Relative Numbers of C-Types and S-Types Among Near Earth Asteroids", *Astronomical Journal*, 98, 1905 - 1911.
- D. C. Jewitt (1990), "The Persistent Coma of Comet P/Schwassmann Wachmann 1", *Astrophysical Journal*, 351, 277-286.
- J. X. Luu and D. C. Jewitt (1990), "CCD Spectra of Asteroids I. Near-Earth and 3:1 Resonance Asteroids", *Astronomical Journal*, 99, 1985-2011.
- J. X. Luu and D. C. Jewitt (1990), "The Nucleus of Comet P/Encke", *Icarus*, 86, 69-81.
- D. C. Jewitt and J. X. Luu (1990), "CCD Spectra of Asteroids II. The Trojans as Spectral Analogues of Cometary Nuclei", *Astronomical Journal*, 100, 933-944.
- J. X. Luu and D. C. Jewitt (1990), "Cometary Activity in 2060 Chiron", *Astronomical Journal*, 100, 913-932.
- D. C. Jewitt and J. X. Luu (1990), "The Submillimeter Radio Continuum of Comet Brorsen-Metcalf", *Astrophysical Journal*, 365, 738-747.

- D. C. Jewitt (1990), "**Far-IR and Submillimeter Radiation from Cometary and Circumstellar Dust**", 24th ESLAB Symposium, "Formation of Stars and Planets and the Evolution of the Solar System", Friedrichshafen, W. Germany. ESA SP-315, 113-120.
- D. C. Jewitt (1991), "**Cometary Photometry**", in Comets In The Post - Halley Era, eds. R. Newburn, M. Neugebauer and J. Rahe. Kluwer Academic Publishers, Netherlands. pp. 19 - 65.
- D. C. Jewitt and J. X. Luu (1992), "Submillimeter Continuum Observations of 2060 Chiron", *Astronomical Journal*, 104, 398-404.
- J. X. Luu and D. C. Jewitt (1992), "High Resolution Surface Brightness Profiles of Near-Earth Asteroids", *Icarus*, 97, 276-287.
- J. X. Luu and D. C. Jewitt (1992), "Near-Aphelion CCD Photometry of Comet P/Schwassmann Wachmann 2", *Astronomical Journal*, 104, 2243-2249.
- D. C. Jewitt and J. X. Luu (1992), "Submillimeter Continuum Emission from Comets", *Icarus*, 100, 187-196.
- D. C. Jewitt (1992), "**Physical Properties of Cometary Nuclei**". In Proceedings of the 30th Liege International Astrophysical Colloquium, edited by A. Brahic, J.-C. Gerard and J. Surdej, Univ. Liege Press, Liege, pp. 85-112.
- D. C. Jewitt and J. X. Luu (1993), "Discovery of the Candidate Kuiper Belt Object 1992 QB1". *Nature*, 362, 730-732.
- J. Annis, and D. C. Jewitt (1993), "A Search for Cold Dust in Clusters of Galaxies with Cooling Flows", *Mon. Not. Roy. Astr. Soc.*, 264, 593-596.
- D. C. Jewitt (1994), "Heat from Pluto", *Astronomical Journal*, 107, 372-378.
- J. Chen and D. Jewitt (1994), "On The Rate At Which Comets Split", *Icarus*, 108, 265-271.
- D. C. Jewitt (1994), "Submillimeter Constraints on Dust Near Lindroos' Post T-Tauri Stars", *Astronomical Journal*, 108, 661-665.
- J. X. Luu, D. C. Jewitt and E. Cloutis (1994). "Near Infrared Spectroscopy of Primitive Solar System Objects", *Icarus*, 109, 133-144.
- M. Senay and D. Jewitt (1994), "Activity in a Distant Comet: First Detection of Carbon Monoxide", *Nature*, 371, 229-231.
- D. C. Jewitt (1994), "**Overview of Planets and their Atmospheres**", in Topics in Atmospheric and Interstellar Physics and Chemistry, edited by C. Boutron, Les Editions de Physique, Grenoble, France, pp. 1-15.

- D. C. Jewitt and J. X. Luu (1995), "The Solar System Beyond Neptune", *Astronomical Journal*, 109, 1867-1876.
- D. C. Jewitt (1995), "Pre-Impact Observations of P/Shoemaker-Levy 9", in Proceedings of the European SL-9/Jupiter Workshop, eds. R. West and H. Bönhardt, European Southern Observatory, Munich, pp. 1-4.
- Luu, J. X., and Jewitt, D. (1995), "Enlarging the Solar System: Observations of the Kuiper Belt." In Completing the Inventory of the Solar System," ASP Conference Series, Vol. 107, eds. T. W. Rettig and J. M. Hahn (Astronomical Society of the Pacific, San Francisco), pp. 245 - 254.
- P. Kalas and D. Jewitt (1995), "Asymmetries in the Beta Pictoris Dust Disk", *Astron. J.*, 110, 794-804.
- H. Weaver and D. Jewitt (1995), "**The String of Pearls**", in The Great Comet Crash, eds. J. Spencer and J. Mitton, Cambridge University Press, Cambridge, pp. 45 - 54.
- J. Luu and D. Jewitt (1996), "Reflection Spectrum of the Kuiper Belt Object 1993 SC", *Astron. J.*, 111, 499-503.
- D. Jewitt, M. Senay, and H. Matthews (1996), "Observations of Carbon Monoxide in Comet Hale-Bopp", *Science*, 271, 1110-1113.
- D. C. Jewitt (1996), "From Comets to Asteroids: When Hairy Stars Go Bald", *Earth, Moon and Planets*, 72, 185-201.
- P. Kalas and D. Jewitt (1996), "The Detectability of β Pictoris-type Circumstellar Disks Around Nearby Main-Sequence Stars", *Astron. J.*, 111, 1347-1355.
- D. Jewitt (1996), "Debris from Comet P/Swift-Tuttle", *Astron. J.*, 111, 1713-1717.
- J. Luu and D. Jewitt (1996). "**The Kuiper Belt**". *Scientific American*, May 1996 issue (pp. 48-55).
- D. Jewitt, J. Luu and J. Chen (1996). "The Mauna-Kea Cerro-Tololo (MKCT) Kuiper Belt and Centaur Survey", *Astron. J.*, 112, 1225-1238.
- J. Luu and D. Jewitt (1996). "Color Diversity Among the Centaurs and Kuiper Belt Objects", *Astron. J.*, 112, 2310.
- D. Jewitt and H. E. Matthews (1997). "Submillimeter Continuum Observations of Comet Hyakutake (1996B2)", *Astron. J.*, 113, 1145-1151.

- P. Kalas and D. Jewitt (1997). "A Candidate Dust Disk Surrounding the Binary Stellar System BD+31°643". *Nature*, 386, 52-54.
- D. Jewitt and J. Luu (1997). "**The Kuiper Belt**". In *Stardust to Planetesimals*, edited by Y. V. Pendleton and A. Tielens, Astronomical Society of the Pacific Conference Series Volume 122, San Francisco, pp. 335 - 345.
- J. Luu, B. Marsden, D. Jewitt, C. Trujillo, C. Hergenrother, J. Chen and W. Offutt (1997). A New Dynamical Class in the Outer Solar System. *Nature*, 387, 573.
- D. Jewitt, H. E. Matthews, T. Owen and R. Meier (1997). The 12C/13C, 14N/15N and 32S/34S Isotope Ratios in Comet Hale-Bopp (C/1995 O1). *Science*, 278, 90-93.
- R. Meier, T. Owen, H. Matthews, D. Jewitt, Bockelee-Morvan, D., Biver, N., Crovisier, J., and Gautier, D. (1998). A Determination of the HDO/H₂O Ratio in Comet C/1995 O1 (Hale-Bopp). *Science*, 279, 842-844.
- J. Luu and D. Jewitt (1998). Optical and Near Infrared Reflection Spectrum of Kuiper Belt Object 1996 TL66. *Ap. J.*, 494, L117.
- C. Trujillo and D. Jewitt (1998). A Semi-Automated Sky Survey for Slow-Moving Objects Suitable for a Pluto Express Mission Encounter. *Astron. J.*, 115, 1680-1687.
- Meier, R., Owen, T., Jewitt, D., Matthews, H., Senay, M., Biver, N., Bockelee-Morvan, D., Crovisier, J., and Gautier, D. (1998). Deuterium in Comet C/1995 O1 (Hale-Bopp): Detection of DCN. *Science*, 279, 1707-1710.
- D. Jewitt and J. Luu (1998). Spectral Diversity in the Kuiper Belt from Optical and Infrared Observations. *Astron. J.*, 115, 1667-1670.
- D. Jewitt, J. Luu and C. Trujillo (1998). Large Kuiper Belt Objects: The Mauna Kea 8k CCD Survey. *Astron. J.*, 115, 2125.
- D. Jewitt and P. Kalas (1998). Thermal Infrared Observations of Centaur 1997 CU26. *Astrophys. J., Lett*, 499, L103-106.
- W. Irvine, E. Bergin, J. Dickens, D. Jewitt, A. Lovell, H. Matthews, F. P. Schloerb, and M. Senay. (1998). Chemical Processing in the Coma as the Source of Cometary HNC. *Nature*, 393, 547-550.
- W. Irvine, J. Dickens, A. Lovell, F. P. Schloerb, M. Senay, E. Bergin, D. Jewitt and H. Matthews. (1998). Chemistry in Cometary Comae. *Faraday Discuss.*, 109, 475-492.
- J. Luu, and D. Jewitt (1998). Deep Imaging of the Kuiper Belt with the Keck 10-meter Telescope. *Ap. J. Lett.*, 502, L91-94.

- J. Raymond, et al. (1998). Solar Wind from Observations of C/1996 Y1. *Ap. J.*, 508, 410.
- D. Jewitt and H. Matthews (1999). Particulate Mass Loss from Comet Hale-Bopp. *Astron. J.*, 117, 1056-1062.
- D. Jewitt (1999). **Kuiper Belt Objects**. *Annual Reviews of Earth and Planetary Science*, 27, 287-312.
- D. Jewitt (1999). **Cometary Rotation: An Overview**. *Earth, Moon and Planets*, 79, 35 - 53.
- C. Trujillo, D. Jewitt and J. Luu (2000). Population of the Scattered Kuiper Belt. *Ap. J. Lett*, 529, L103.
- D. Jewitt (1999). **The Kuiper Belt**. *Physics World*, 12, No. 7, 37-41.
- J. Luu, D. Jewitt and C. Trujillo (1999). Water Ice in Chiron and Its Implications for Centaurs and Kuiper Belt Objects. *Ap. J. Lett.*, 531, L151.
- D. Jewitt, C. Trujillo and J. Luu (2000). Population and Size Distribution of Small Jovian Trojan Asteroids. *Astron. J.*, 120, 1140-1147.
- D. Jewitt and J. Luu (2000). **The Kuiper Belt**. In *Protostars and Planets IV*. Edited by Vince Mannings, A. Boss and S. Russell, University of Arizona Press, Tucson. pp:1201-1229.
- S. Sheppard, Jewitt, D., Trujillo, C., Brown, M., and Ashley, M. (2000). A Wide Field CCD Survey for Centaurs and Kuiper belt Objects. *Astron. J.* 120, 2687-2694.
- J. Li, Jewitt, D., and Labonte, B. (2000). On the Nature of Solar Polar Rays. *Ap. J. Lett.*, 539, L67-70.
- A. Fitzsimmons, Jewitt, D., and West, R. (2000). *Minor Bodies in the Outer Solar System*. Springer Press, Berlin.
- Y. Fernandez, D. Jewitt and S. Sheppard (2001). Low Albedos of Dead Comet Nucleus Candidates. *Ap. J. Lett*, 553, 197-200.
- C. Trujillo, D. Jewitt and J. Luu (2001). Statistical Properties of the Trans-Neptunian Belt: The CFHT Survey. *Astronomical Journal*, 122, 457-473.
- D. Jewitt, and Fernandez, Y. (2001). **Physical Properties of Planet-Crossing Objects**. In *Collisional Processes in the Solar System*. ed. H. Rickman and M. Marov. Astrophysics and Space Science Library Series, Kluwer Academic Publishers, Dordrecht, pp. 143-161.
- D. Jewitt, H. Aussel, A. Evans (2001). The size and albedo of the Kuiper-belt object (20000) Varuna. *Nature*, 411, 446-447

- D. Jewitt and J. Luu (2001). Colors and Spectra of Kuiper Belt Objects. *Astron. J.*, 122, 2099-2114.
- D. Jewitt (2002). Cometary Nuclei: The Missing Ultra-Red Matter. *Astron. J.*, 123, 1039-1049.
- Y. Fernandez, D. Jewitt and S. Sheppard (2002). Thermal Properties of Centaurs Asbolus and Chiron. *Astronomical Journal*, 123, 1050-1055.
- J. Luu and D. Jewitt (2002). **Kuiper Belt**. *Annual Review of Astronomy and Astrophysics*, 40, 63-101.
- D. Jewitt and S. Sheppard (2002). Rotation and Shape of Trans-Neptunian Object (20000) Varuna. *Astronomical Journal*, 123, 2110-2120.
- S. Sheppard and D. Jewitt (2002). Time-Resolved Photometry of Kuiper Belt Objects: Rotations, Shapes and Phase Functions. *Astronomical Journal*, 124, 1757-1775.
- D. Jewitt (2002). **The Kuiper Belt As An Evolved Circumstellar Disk**. In *The Origins of Stars and Planets: The VLT View*. Eds. J. Alves and M. McCaughrean, Springer Verlag, Heidelberg, pp. 405-415
- D. Jewitt (2002). **From Kuiper Belt to Comet Nucleus**. In *Proceedings of Asteroids, Comets, Meteors 2002*, ESA Special Publications Series, SP-500, ESA Pub. Division, Noordwijk. pp. 11-20.
- D. Jewitt, S. Sheppard and Y. Fernandez (2003). 143P/Kowal-Mrkos and the Shapes of Cometary Nuclei. *Astron. J.*, 125, 3366-3377
- S. Sheppard and D. Jewitt (2003). Discovery of 22 New Irregular Satellites of Jupiter, *Nature*, 423, 261-263
- Y. Fernandez, S. Sheppard and D. Jewitt (2003). The Albedo Distribution of Jovian Trojans Asteroids. *Astronomical Journal*, 126, 1563-1574
- D. Jewitt and S. Sheppard (2004). The Nucleus of 48P/Johnson. *Astron. J.* 127, 1784-1790.
- H. Hsieh, D. Jewitt and Y. Fernandez (2004). A Comet Amongst the Asteroids: The Strange Case of 133P/Elst-Pizarro. *Astronomical Journal*, 127:2997-3017.
- S. Sheppard and D. Jewitt (2004). Extreme Kuiper Belt Object 2001 QG298 and the Fraction of Contact Binaries. *Astronomical Journal*, 127:3023-3033.
- D. Jewitt (2004). Project Pan-STARRS and the Outer Solar System. *Earth, Moon and Planets* 92, 465-476.

- S. Sheppard and D. Jewitt (2004). "Hawaii Kuiper Belt Variability Project: An Update" *Earth, Moon and Planets*, 92, 207-219.
- D. Jewitt, S. Sheppard and C. Porco (2004). **Jupiter's Outer Satellites and Trojans**. In JUPITER II, edited by Fran Bagenal, Cambridge University Press, Cambridge.
- D. Jewitt and J. Luu (2004). Crystalline Water Ice in Kuiper Belt Object (50000) Quaoar. *Nature*, 432, 731-733.
- D. Jewitt (2005). A First Look at the Damocloids. *Astronomical Journal*, 129, 530-538.
- S. Sheppard, D. Jewitt and J. Kleyna (2005). Ultradeep Survey for Irregular Satellites of Uranus: Limits to Completeness. *Astronomical Journal*, 129, 518-525.
- H. Hsieh and D. Jewitt (2005). Search for Activity in (3200) Phaethon. *Ap. J.*, 624, 1093-1096.
- D. Jewitt (2005). **From Cradle to Grave: The Rise and Demise of the Comets**. In COMETS II, edited by M. Festou, H. Weaver and U. Keller. Univ. Az. Press, Tucson.
- D. Jewitt and S. Sheppard (2005). **Irregular Satellites in the Context of Giant Planet Formation**. *Space Sci. Review* 116, 441-456.
- Y. Fernandez, D. Jewitt and S. Sheppard (2005). Albedos of Asteroids in Comet-Like Orbits. *Astronomical Journal*, 130, 308-318.
- A. Delsanti and D. Jewitt (2006). **The Solar System Beyond the Planets**. In *Solar System Update*, edited by Ph. Blondel and J. Mason, Springer-Praxis, Germany, pp. 267-294.
- H. Hsieh and D. Jewitt (2006). **Active Asteroids: Mystery in the Main Belt**. In *Asteroids, Comets and Meteors 2005*, IAU Symp. 229, edited by D. Lazzaro, S. Ferraz-Mello and J. Fernandez, Cambridge University Press, Cambridge, pp. 425-438.
- D. Jewitt (2006). Comet D/1819 W1 (Blanpain): Not Dead Yet. *Astron. J.* 131, 2327-2331.
- S. Sheppard, D. Jewitt and J. Kleyna. (2006). A Survey for "Normal" Irregular Satellites Around Neptune: Limits to Completeness. *Astron. J.*, 132, 171-176.
- D. Jewitt and H. Hsieh (2006). Physical Observations of 2005 UD: A Mini Phaethon. *Astronomical Journal*, 132, 1624-1629.
- D. Jewitt, S. Sheppard and J. Kleyna. (2006). **The Strangest Satellites in the Solar System**. *Scientific American*, August issue, pp. 40-47.
- W. Zheng, D. Jewitt and R. Kaiser. (2006). Temperature Dependence of the Formation of

Hydrogen, Oxygen and Hydrogen Peroxide in Electron-Irradiated Crystalline Water Ice. *Astrophysical Journal*, 648, 753-761.

- D. Jewitt, L. Chizmadia, R. Grimm and D. Prialnik (2007). **Water in Small Bodies of the Solar System**. In *Protostars and Planets V*, (eds. B. Reipurth, D. Jewitt and K. Keil), Univ. Az. Press, Tucson, pp. 863-878.
- D. Jewitt and J. Luu (2007). **On Pluto, Perception and Planetary Politics**. *Daedalus*, 136, 132-136.
- P. Lacerda and D. Jewitt (2007). Densities of solar system objects from their rotational lightcurves. *Astron. J.*, 133, 1393-1408.
- B. Yang and D. Jewitt (2007). Spectroscopic Search for Water Ice on Jovian Trojan Asteroids. *Astron. J.*, 134, 223-228.
- R. Mann, D. Jewitt and P. Lacerda (2007). Fraction of Contact Binary Trojan Asteroids. *Astron. J.*, 134, 1133-1144.
- W. Zheng, D. Jewitt and R. Kaiser (2007). Electron Irradiation of Crystalline and Amorphous D₂O Ice. *Chem. Phys. Letters* 435, 289-294.
- D. Jewitt and N. Haghighipour (2007). **Irregular Satellites of the Planets: Capture Processes in the Early Solar System**. *Annual Reviews of Astronomy and Astrophysics*, 45, 261-295.
- D. Jewitt, N. Peixinho and H. Hsieh (2007). U-Band Photometry of Kuiper Belt Objects. *Astron. Journal*. 134, 2046-2053.
- D. Jewitt. (2008). **Kuiper Belt and Comets: An Observational Perspective**. *Saas Fee Advanced Courses* (eds. K. Altwegg et al), Springer-Verlag, Heidelberg, pp. 1-78.
- D. Jewitt (2008). **Foreword to The Solar System Beyond Neptune**. (ed. A. Barucci et al.), Univ Az. Press, Tucson, pp. xv-xviii.
- D. Jewitt, C. Garland and H. Aussel (2008). Deep Search for Carbon Monoxide in Cometary Precursors Using Millimeter Wave Spectroscopy. *Astronomical Journal*, 135, 400-407.
- P. Lacerda, D. Jewitt and N. Peixinho (2008). High Precision Photometry of Extreme KBO 2003 EL61. *Astronomical Journal*, 135, 1749-1756.
- N. Haghighipour and D. Jewitt (2008). A Region Void of Irregular Satellites Around Jupiter. *Astronomical Journal*, 136, 909-918.
- T. Kasuga and D. Jewitt (2008). Observations of 1999 YC and the Breakup of the Geminid Stream Parent. *Astronomical Journal*, 136, 881-889.

- N. Peixinho, P. Lacerda and D. Jewitt (2008). Color-Inclination Relation of the Classical Kuiper Belt Objects. *Astronomical Journal*, 136, 881-889.
- D. Jewitt (2009). **Six Hot Topics in Planetary Astronomy**. Invited chapter for *Small Bodies in Planetary Systems*, Lecture Notes in Physics Series, ed. Ingrid Mann, Akiko Nakamura and Tadashi Mukai, Springer Verlag, Heidelberg, pp. 259-296.
- H. Hsieh, D. Jewitt and M. Ishiguro (2009). Physical Properties of Main-Belt Comet P/2005 U1 (Read). *Astronomical Journal*, 137, 157-168.
- W. Zheng, D. Jewitt and R. Kaiser (2009). Infrared Spectra of Ammonia-Water Ices. *Ap. J. Supp.*, 181, 53-61.
- D. Jewitt, A. Moro-Martin and P. Lacerda (2009). **The Kuiper Belt and Other Debris Disks**. *Astrophysics in the Next Decade* (book), Springer, Heidelberg.
- H. Hsieh, D. Jewitt and Y. Fernandez (2009). Albedos of Main-Belt Comets 133P/Elst-Pizarro and 176P/LINEAR. *Ap. J. Lett.*, 694, L111-L114.
- W. Zheng, D. Jewitt and R. Kaiser (2009). On the State of Water Ice on Saturn's Moon Titan and Implications to Icy Bodies in the Outer Solar System. *J. Phys. Chem. A* 2009, 113, 11174–11181
- D. Jewitt (2009). The Active Centaurs. *Astronomical Journal*, 137, 4296-4312.
- D. Jewitt, B. Yang and N. Haghighipour (2009). Main-Belt Comet P/2008 R1 (Garradd). *Astronomical Journal*, 137, 4313-4321.
- B. Yang, D. Jewitt and S. Bus (2009). Comet 17P/Holmes in Outburst: The Near Infrared Spectrum. *Astronomical Journal*, 137, 4538-4546.
- Y. Fernandez, D. Jewitt and J. Ziffer (2009). Albedos of Small Jovian Trojans. *Astronomical Journal*, 138, 240-250.
- D. Jewitt (2009). **Icy Bodies in the New Solar System**. Proceedings of the International Astronomical Union, IAU Symposium, Volume 263, p. 3-16, J. Fernandez et al. (eds). Cambridge University Press.
- H. Hsieh, D. Jewitt, P. Lacerda, S. Lowry and C. Snodgrass (2010). The Return of Activity on Main-Belt Comet 133P/Elst-Pizarro. *MNRAS*, 403, 363-377.
- R. Stevenson, J. Kleyna and D. Jewitt (2010). Transient Fragments in Outbursting Comet 17P/Holmes. *Astronomical Journal*, 139, 2230-2240.
- D. Jewitt (2010). **What Else is Out There?** *Sky and Telescope*, March issue, pp. 20 - 24.

- D. Jewitt (2010). **The Discovery of the Kuiper Belt**. Astronomy Beat, Astronomical Society of the Pacific. May 2010.
- D. Jewitt, H. Weaver, J. Agarwal, M. Mutchler and M. Drahus (2010). Newly Disrupted Main Belt Asteroid P/2010 A2. *Nature*, 467, 817-819.
- D. Jewitt and J. Li (2010). Activity in Geminid Parent (3200) Phaethon. *Astronomical Journal*, 140, 1519.
- J. Li, D. Jewitt, J. Clover and B. Jackson (2010). Outburst of Comet 17P/Holmes Observed With The Solar Mass Ejection Imager. *Astronomical Journal*, *Astrophysical Journal*, 728, 31.
- B. Yang and D. Jewitt (2011). A Near-Infrared Search for Silicates in Jovian Trojan Asteroids. *Astronomical Journal*, 141, 95-102.
- D. Jewitt, H. Weaver, M. Mutchler, S. Larson and J. Agarwal (2011). Hubble Space Telescope Observations of Main Belt Comet (596) Scheila. *Ap. J. Lett.*, 733, L4
- M. Drahus, D. Jewitt, A. Guilbert-Lepoutre, W. Waniak, J. Hoge, D. Lis, H. Yoshida and R. Peng (2011). Rotation State of Comet 103P/Hartley 2 from Radio Spectroscopy at 1-mm. *Ap. J. Lett.*, 734, L4.
- H. Hsieh, P. Lacerda, M. Ishiguro and D. Jewitt (2011). Physical Properties of Main-Belt Comet 176P/LINEAR. *Astronomical Journal*, 142, 29.
- D. Jewitt, S. Stuart and J. Li (2011). Prediscovery Observations of P/2010 A2. *Astronomical Journal*, 142, 28.
- A. Guilbert-Lepoutre and D. Jewitt (2011). Thermal Shadows and Compositional Structure in Comet Nuclei. *Ap. J.* 743, 31
- D. Jewitt and A. Guilbert-Lepoutre (2012). Limits to Ice on Asteroids (24) Themis and (65) Cybele. *Astron. J.* 143, 21
- M. Drahus, D. Jewitt, A. Guilbert-Lepoutre, W. Waniak and S. Sievers (2012). The Sources of HCN and CH₃OH in Comet 103P/Hartley 2. *Ap. J.*, 756, 80
- D. Jewitt (2012). The Active Asteroids. *Astron. J.* 143, 66
- R. Stevenson and D. Jewitt (2012). Near-Nucleus Photometry of Outbursting Comet 17P/Holmes. *Astron. J.*, 144, 138
- P. Lacerda and D. Jewitt (2012). Extinction in the Coma of Comet P/Holmes. *Ap. J. Letters*, 760, 2 (5pp)

- D. Jewitt, M. Ishiguro and J. Agarwal (2013). Large particles in Active Asteroid P/2010 A2. *Ap. J. Letters*, 764, 5 (6pp)
- D. Jewitt (2013). Properties of Near-Sun Asteroids. *Astronomical Journal*, 145, 133 (6pp)
- J. Agarwal, D. Jewitt and H. Weaver (2013). Dynamics of Large Fragments in the Tail of Active Asteroid P/2010 A2. *Ap. J.* 769, 46 (10pp)
- J. Li and D. Jewitt (2013). Recurrent Perihelion Activity in (3200) Phaethon. *Astronomical Journal*, 145, 154 (9pp)
- D. Jewitt, J. Li and J. Agarwal (2013). The Dust Tail of Asteroid (3200) Phaethon. *Ap. J. Letters*, 771, 36 (5pp)
- D. Jewitt (2013). **Mysterious Travelers**. In *Sky and Telescope*, December 2013, pp:18-24.
- D. Jewitt, J. Agarwal, H. Weaver, M. Mutchler and S. Larson (2013). The Extraordinary Multi-Tailed Main-belt Comet P/2013 P5. *Astrophysical Journal*, 778:L21 (4pp).
- D. Jewitt, J. Agarwal, J. Li, H. Weaver, M. Mutchler and S. Larson (2014). Disintegrating Asteroid P/2013 R3. *Astrophysical Journal*, 784:L8 (5pp)
- D. Jewitt, M. Ishiguro, H. Weaver, J. Agarwal, M. Mutchler and S. Larson (2014). Hubble-Space Telescope Investigation of Main-Belt Comet 133P/Elst-Pizarro. *Astron. J.*, 147, 117(12pp).
- M. Ishiguro, D. Jewitt, H. Hanayama, F. Usui, T. Sekiguchi, K. Yanagisawa, D. Kuroda, M. Yoshida, K. Ohta, N. Kawai, T. Miyayi, H. Fukushima and J. Watanabe. (2014). Outbursting Comet P/2010 V1 (Ikeya-Murakami): A Miniature Comet Holmes. *Astronomical Journal*, 787:55(11pp)
- D. Jewitt, J. Agarwal, H. Weaver, M. Mutchler and S. Larson (2015). Episodic Ejection from Active Asteroid 311P/ANSTARRS, *Ap. J.*, 798:109 (12pp)
- C. Qi, M. Hogerheijde, D. Jewitt, M. Gurwell and D. Wilner (2015). Peculiar Near-Nucleus Outgassing of Comet 17P/Holmes During its 2007 Outburst, *Ap. J.* 799:102
- D. Jewitt, J. Agarwal, N. Peixinho, H. Weaver, M. Mutchler, M. Hui, J. Li and S. Larson (2015). New Active Asteroid 313P/Gibbs. *Astronomical Journal*, 149:81(9pp).
- D. Jewitt, H. Hsieh and J. Agarwal (2015). **The Active Asteroids**, for ASTEROIDS IV, Univ. Az. Press, Tucson.
- D. Jewitt and E. Young (2015). **The Origins of Earth's Oceans**. *Scientific American* (March issue).

- M. Hui and D. Jewitt (2015). Archival Observations of Comet 313P/Gibbs. *Astronomical Journal*, 149:134(8pp).
- J. Li and D. Jewitt (2015). Demise of Comet C/Elenin: Gone with a Whimper, Not a Bang. *Astronomical Journal*, 149:133(13pp).
- D. Jewitt, J. Li, J. Agarwal, H. Weaver, M. Mutchler and S. Larson (2015). Nucleus and Mass-Loss in Active Asteroid 313P/Gibbs, *The Astronomical Journal*, 150:76(12pp)
- T. Kasuga and D. Jewitt (2015). Physical Observations of (196256) 2003EH1, Presumed Parent of the Quadrantid Meteoroid Stream. *Astronomical Journal*, 150:152 (10pp)
- D. Jewitt (2015). **The Kuiper Belt**. *The Sky at Night*, BBC Magazine, November issue
- D. Jewitt (2015). Color Systematics of Comets and Related Bodies. *The Astronomical Journal*, 150, 201(18pp)
- J. Agarwal, D. Jewitt, H. Weaver, M. Mutchler and S. Larson (2015). Hubble and Keck Telescope Observations of Active Asteroid 288P/300163 (2006 VW139). *Astronomical Journal*, 151:12(11pp)
- D. Jewitt (2015). **Having a Look**. In the compendium "We Discover", edited by Marc Guttman, Pronoun Press, London
- D. Jewitt, J. Agarwal, H. Weaver, M. Mutchler, J. Li and S. Larson (2016). Hubble Space Telescope Observations of Active Asteroid 324P/La Sagra. *Astronomical Journal*, 152:77 (9pp)
- D. Jewitt M. Mutchler, H. Weaver, M. Hui, J. Agarwal, M. Ishiguro, J. Kleyna, J. Li, K. Meech, M. Micheli, R. Wainscoat, and R. Weryk (2016). Fragmentation Kinematics in Comet 332P/Ikeya-Murakami. *Ap. J.*, 829:L8(6pp)
- M. Hui and D. Jewitt (2017). Non-Gravitational Acceleration of the Active Asteroids. *Astronomical Journal*, 153:80(9pp)
- M. Hui, D. Jewitt and X. Du (2017). Split Active Asteroid P/2016 J1. *Astronomical Journal*, 153:141
- D. Jewitt, J. Agarwal, J. Li, H. Weaver, M. Mutchler, S. Larson (2017). Anatomy of an Asteroid Break-Up: The Case of P/2013 R3. *Astronomical Journal*, 153:223 (17pp)
- J. Agarwal, D. Jewitt, M. Mutchler, H. Weaver, S. Larson (2017). A Binary Main-Belt Comet. *Nature*, 549, 357.
- D. Jewitt, M. Hui, M. Mutchler, H. Weaver, J. Li, J. Agarwal (2017) A Comet Active Beyond the Crystallization Zone. *Ap.J.Lett.*, 847, L19.

- D. Jewitt, J. Luu, J. Rajagopal, R. Kotulla, S. Ridgway, W. Liu and T. Augusteijn (2017). Interstellar Interloper 1I/2017 U1: Observations from the NOT and WIYN Telescopes. *Ap. J. Letters*, 850:L36(7pp)
- D. Jewitt (2018). The Trojan Color Conundrum. *Astronomical Journal*, 155:56(7pp)
- M. Hui, D. Jewitt and D. Clark (2018). Pre-discovery Observations and Orbit of Comet C/2017 K2 (PANSTARRS). *Astronomical Journal*, 155:25(9pp)
- A. Graykowski and D. Jewitt (2018). Colors and Shapes of the Irregular Planetary Satellites. *The Astronomical Journal*, 155:184(10pp)
- D. Jewitt, H. Weaver, M. Mutchler, J. Li, J. Agarwal, and S. Larson (2018). The Nucleus of Active Asteroid 311P/(2013 P5) PANSTARRS. *The Astronomical Journal*, in press
- D. Jewitt (2018). Some Remarks About Solar System Structure, Models, Observations and Wing Ip. For the Serendipities in the Solar System meeting, Taiwan, July 2017. In press.