

Amanda R. Hendrix

Senior Scientist, Planetary Science Institute; arh@psi.edu; 310.922.3414

Education

Ph.D., Aerospace Engineering Sciences, University of Colorado, 1996

thesis title: *The Galileo Ultraviolet Spectrometer: In-Flight Calibration and the Ultraviolet Albedos of the Moon, Gaspra, Ida and Europa*

thesis advisor: Professor Charles Barth

M.S., Aerospace Engineering Sciences, University of Colorado, 1994

B.S., Aeronautical Engineering, California Polytechnic State University, 1991

Research Interests

I study icy and non-icy moons, ocean worlds and small bodies in the solar system, primarily via ultraviolet-visible spectroscopy. I am interested in using space-based and ground-based observations to understand how geological and environmental processes affect surface composition and chemistry.

Professional Appointments and Experience

Senior Scientist, **Planetary Science Institute**, 2012- present

Principal Investigator, TREX SSERVI Node, 2017 – present

Editor-in-Chief, Journal of Geophysical Research: Planets, Jan 2024-

Science editor, Icarus journal, Jan 2022-present

Adjunct Professor, Geological Sciences Dept., **Cal Poly Pomona**, 2014

Adjunct Professor, Astronomy and Earth Science Dept., **Mount San Antonio College**, 2013-2014

Research Scientist, Asteroids, Comets and Planetary Satellites Group, **Jet Propulsion Laboratory**, 2000 –2012

Deputy Project Scientist, Cassini Mission to Saturn, May 2010-September 2012

Guest Editor, Icarus special issue “Cassini at Saturn,” 2009

Co-investigator, Europa Clipper UVS, January 2023-present

Co-investigator, Cassini UVIS, August 1999 - 2017

Co-investigator, LRO LAMP, January 2008 – present

Co-investigator, Galileo UVS, September 1997-2003

Fellow, NASA-ASEE Summer Faculty Program, **Johnson Space Center**, Earth Science and Solar System Exploration Div., 1999

Principal Investigator: HST, CDAP, PDART, LASER, OPR, PG&G, JSDAP, MDAP, PDART, PICASSO research programs

Postdoctoral research associate, **Univ. Colorado**, Laboratory for Atmospheric and Space Physics, 1996 –2000

Community Leadership Experience

NASA Outer Planets Assessment Group (OPAG) Chair, November 2022- present

National Academies Committee on Planetary Protection, co-chair, 2020-present

National Academies NASA Mission Critical Workforce Infrastructure and Technology study member, 2023

New Great Observatories Science Analysis Group (Co-chair), compiling a science case for the three mission entrants into NASA's Great Observatories Mission & Technology Maturation Program (GOMaP), 2023
AAS/DPS Chair 2019-2020, DPS Vice Chair, 2018-2019, DPS Past Chair, 2020-2021
NASA Planetary Protection Independent Review Board
JWST Users Committee, 2017-2022
National Academies Committee on the Review of Progress Toward Implementing the Decadal Survey Vision and Voyages for Planetary Sciences, 2017-2018
NASA Outer Planets Assessment Group (OPAG) steering committee, 2016-present
NASA Roadmaps to Ocean Worlds (ROW) co-chair, 2016-2019
JWST Solar System Observers Advisory Panel (SSOAP), 2014-2015

Telescope Allocation Committee experience

HST Cycle 29 TAC, chair of solar system panel, 2021
JWST cycle 1 solar system panel, 2021
NASA Planetary Missions Senior Review panel member, 2019
HST TAC, solar system panel, 2018, 2010, 2007, 2003
HST Europa Advisory Committee, 2017
NOAO Solar System TAC May 2008-May 2010

Honors and Awards

2019 Global Scholar in Residence, Holy Innocents' Episcopal School, Atlanta
2018, Minor Planet 6813 Amandahendrix
2006, JPL Lew Allen Award for Excellence
2005, JPL Section 317 Award for Excellence (Cassini Science Planning leadership)
1999, NASA-ASEE Summer Faculty Fellowship
1993-1995, Patricia Roberts Harris Fellowship
1991, California Pre-Doctoral Fellowship

Student/Post-doc advisor

Emilie Royer, JPL post-doc, April 2012-September 2013
Timothy Cassidy, JPL post-doc, November 2009-July 2011
Mark Elowitz, Open University, Ph.D. thesis co-advisor, 2017-2020
Lizeth Magaña, UTSA, Ph.D. thesis committee, 2018-2021
Elizabeth Czajka, UTSA, Ph.D. thesis committee, 2019-present
Jade Decker, Mamaroneck High School 2021-2022
Camilo Jaramillo, Penn State, Ph.D. thesis committee 2022-2023
Amanda Steckel, Univ. Colorado, Ph.D. thesis co-advisor 2022-present
Kateřina Flanderová (née Chrbolková) - opponent at doctoral thesis defense, University of Helsinki, November, 2022.

Teaching Experience

Univ. Colorado, Astrophysical and Planetary Sciences Dept., Aug 1996 – Nov 2000
“Astronomy of the Solar System”
“Planets, Moons and Rings”
Mount San Antonio College, Astronomy and Earth Science Dept. Feb 2013-Dec. 2014

ASTR7 “Geology of the Solar System”
Cal Poly Pomona, Geological Sciences Dept., April –December 2014
GSC 495, “Planetary Science”
GSC 116, “Introductory Astronomy”

Publications.

Refereed Papers

1. Hendrix, Amanda R., 1996. The Galileo Ultraviolet Spectrometer: In-flight calibration and ultraviolet albedos of the Moon, Gaspra, Ida and Europa. Ph.D. thesis, Univ. Colorado.
2. Hendrix, A. R., C. A. Barth, C. W. Hord, A. L. Lane 1998. Europa: Disk-Resolved Ultraviolet Measurements using the Galileo Ultraviolet Spectrometer. *Icarus* 135: 79-84.
3. Pryor, W. R., J. M. Ajello, W. K. Tobiska, D. E. Shemansky, G. K. James, C. W. Hord, S. K. Stephens, R. A. West, A. I. F. Stewart, W. E. McClintock, K. E. Simmons, A. R. Hendrix, D. Miller 1998. Galileo ultraviolet spectrometer observations of Jupiter's auroral spectrum from 1600-3200 Å. *J. Geophys. Res.* 103, 20,149-20,158.
4. Carlson, R. W., M. S. Anderson, R. E. Johnson, W. D. Smythe, A. R. Hendrix, C. A. Barth, L. A. Soderblom, G. B. Hansen, T. B. McCord, J. B. Dalton, R. N. Clark, J. H. Shirley, A. C. Ocampo, D. L. Matson 1999. Hydrogen Peroxide on the Surface of Europa. *Science* 283: 2062-2064.
5. Hendrix, A. R., C. A. Barth, C. W. Hord 1999. Ganymede's Ozone-Like Absorber: Observations by the Galileo Ultraviolet Spectrometer. *J. Geophys. Res.* 104: 14169-14178.
6. Hendrix, A. R., C. A. Barth, C. W. Hord 1999. Io's Patchy SO₂ Atmosphere as Measured by the Galileo Ultraviolet Spectrometer. *J. Geophys. Res.* 104: 11817-11826.
7. Fanale, F. P., James C Granahan, Thomas B McCord, Gary Hansen, Charles A Hibbitts, Robert Carlson, Dennis Matson, Adriana Ocampo, Lucas Kamp, William Smythe, Frank Leader, Robert Mehlman, Ronald Greeley, Robert Sullivan, Paul Geissler, Charles Barth, Amanda Hendrix, Beth Clark, Paul Helfenstein, Joseph Veverka, Michael JS Belton, Kris Becker, Tammy Becker 1999. Galileo's multiinstrument spectral view of Europa's surface composition. *Icarus* 139, 179-188.
8. Fanale, Fraser P. ; Granahan, James C. ; Greeley, Ronald ; Pappalardo, Robert ; Head, James ; Shirley, James ; Carlson, Robert ; Hendrix, Amanda ; Moore, Jefferey ; McCord, Thomas B. ; Belton, Michael 2000. Tyre and Pwyll: Galileo orbital remote sensing of mineralogy versus morphology at two selected sites on Europa. *Journal of Geophysical Research*, Volume 105, Issue E9, 10.1029/1999JE001102

9. Herbert, F., Schneider, N. M., Hendrix, A. R., Bagenal, F. 2003. Hubble Space Telescope observations of sulfur ions in the Io plasma torus: New constraints on the plasma distribution. *J. Geophys. Res.* 108.
10. Hendrix, A. R., F. Vilas, M. C. Festou 2003. Vesta's UV Lightcurve: Hemispheric Variation in Brightness and Spectral Reversal. *Icarus* 162: 1-9.
11. Domingue, D. L. and Hendrix, A. R. 2005. A Search for Temporal Variability in the Surface Chemistry of the icy Galilean Satellites. *Icarus* 173: 50-65.
12. Hendrix, A. R., D. L. Domingue, K. King 2005. The Icy Galilean Satellites: Ultraviolet Phase Curve Analysis. *Icarus* 173: 29-49.
13. Esposito, L.W., J. E. Colwell, K. Larsen, W. E. McClintock, A. I. F. Stewart, J. Tew Hallett, D. E. Shemansky, J. M. Ajello, C. J. Hansen, A. R. Hendrix, R. A. West, H. U. Keller, A. Korth, W. R. Pryor, R. Reulke, Y. L. Yung 2005. Ultra-Violet Imaging Spectroscopy shows an active Saturn system. *Science* 307, 1251-1255.
14. Hansen, C. J., D. E. Shemansky, A. R. Hendrix 2005. Cassini UVIS Observations of Europa's Oxygen Atmosphere and Torus. *Icarus* 176: 305-315.
15. Spencer, J. R., J. C. Pearl, M. Segura, F. M. Flasar, A. Mamoutkine, P. Romani, B. J. Buratti, A. R. Hendrix, L. J. Spilker, R. M. C. Lopes 2006. Cassini encounters Enceladus: Background and the discovery of a south polar hot spot. *Science* 311: 4101-1405.
16. Hansen, C. J., L. Esposito, A. I. F. Stewart, J. Colwell, A. Hendrix, W. Pryor, D. Shemansky, R. West 2006. Enceladus's water vapor plume. *Science* 311: 1422-1425.
17. Hendrix, A. R. and F. Vilas 2006. The Effects of Space Weathering at UV Wavelengths: S-class Asteroids, *Astron. J.*: 132: 1396-1404.
18. Cruikshank, D. P. *et al.* 2007. Surface Composition of Hyperion. *Nature* 448: 54-56.
19. Hendrix, A. R. and C. J. Hansen, 2008. Ultraviolet Observations of Phoebe from Cassini UVIS, *Icarus* 193: 323-333.
20. Hendrix, A. R. and C. J. Hansen 2008. The Albedo Dichotomy of Iapetus Measured at UV Wavelengths, *Icarus* 193: 344-351.
21. Jones, G. H. *et al.* 2008. The dust halo of Saturn's largest icy moon, Rhea. *Science* 319: 1380.
22. Cloutis, E. A. *et al.* 2008. Ultraviolet spectral reflectance properties of common planetary minerals, *Icarus* 197: 321-347.

23. Hansen, C. J. *et al.*, 2008. Water vapour jets inside the plume of gas leaving Enceladus, *Nature*, 456: 477-479.
24. Hendrix, A. R. and R. E. Johnson 2008. Callisto: New insights from Galileo disk-resolved UV measurements, *Astrophys. J.* 687: 706.
25. Lopes, R. M. C. ; Buratti, B. J. ; Hendrix, A. R. 2008. The Saturn system's icy satellites: New results from Cassini. *Icarus*, Volume 193, Issue 2, p. 305-308
26. Colwell, J. E., S. Sture, M. Cintala, D. Durda, A. Hendrix, T. Goudie, D. Curtis, D. J. Ashcom, M. Kanter, T. Keohane, A. Lemos, M. Lupton, M. Route 2008. Ejecta from impacts at 0.2-2.3 m/s in low gravity. *Icarus*, 195, 980-917.
27. Gladstone, G. R., S. A. Stern, K. D. Retherford, R. K. Black, D. C. Slater, M. W. Davis, M. H. Versteeg, K. B. Persson, J. W. Parker, D. E. Kaufmann, A. F. Egan, T. K. Greathouse, P. D. Feldman, D. Hurley, W. R. Pryor, A. R. Hendrix 2010. LAMP: The Lyman Alpha Mapping Project on NASA's Lunar Reconnaissance Orbiter Mission. *Space Sci. Rev.* 150: 161-181.
28. Gladstone, G. R., Dana M. Hurley, Kurt D. Retherford, Paul D. Feldman, Wayne R. Pryor, Jean-Yves Chaufray, Maarten Versteeg, Thomas K. Greathouse, Andrew J. Steffl, Henry Throop, Joel Wm. Parker, David E. Kaufmann, Anthony F. Egan, Michael W. Davis, David C. Slater, Joey Mukherjee, Paul F. Miles, Amanda R. Hendrix, Anthony Colaprete, S. Alan Stern 2010. LRO-LAMP Observations of the LCROSS Impact Plume. *Science*, 330, 472-476.
29. Hendrix, A. R., C. J. Hansen, G. M. Holsclaw 2010. The Ultraviolet Reflectance of Enceladus: Implications for Surface Composition, *Icarus* 206: 608-617.
30. Hendrix, A. R., T. A. Cassidy, R. E. Johnson, C. Paranicas 2011. Europa's Disk-Resolved Ultraviolet Spectra: Relationships with Plasma Flux and Surface Terrains. *Icarus* 212: 736-743.
31. Hansen, C. J., Donald E Shemansky, Larry W Esposito, AIF Stewart, BR Lewis, JE Colwell, AR Hendrix, Robert A West, JH Waite, B Teolis, BA Magee 2011. The composition and structure of the Enceladus plume. *Geophys. Res. Lett.* 38, L11202, doi:10.1029/2011GL047415
32. Pryor, W. R., Abigail M. Rymer, Donald G. Mitchell, Thomas W. Hill, David T. Young, Joachim Saur, Geraint H. Jones, Sven Jacobsen, Stan W. H. Cowley, Barry H. Mauk, Andrew J. Coates, Jacques Gustin, Denis Grodent, Jean-Claude Gérard, Laurent Lamy, Jonathan D. Nichols, Stamatios M. Krimigis, Larry W. Esposito, Michele K. Dougherty, Alain J. Jouchoux, A. Ian F. Stewart, William E. McClintock, Gregory M. Holsclaw, Joseph M. Ajello, Joshua E. Colwell, Amanda R. Hendrix, Frank J. Crary, John T. Clarke, Xiaoyan Zhou 2011. The auroral footprint of Enceladus on Saturn. *Nature*, 472, 331-333.

33. Zastrow, M., J. T. Clarke, A. R. Hendrix, K. S. Noll 2012. UV spectrum of Enceladus. *Icarus* 220: 29-35.
34. Gladstone, G. R., K. D. Retherford, A. F. Egan, D. E. Kaufmann, P. F. Miles, J. W. Parker, D. Horvath, P. M. Rojas, M. H. Versteeg, M. W. Davis, T. K. Greathouse, D. C. Slater, J. Mukherjee, A. J. Steffl, P. D. Feldman, D. M. Hurley, W. R. Pryor, A. R. Hendrix, E. Mazarico, S. A. Stern 2012. Far-ultraviolet reflectance properties of the Moon's permanently shadowed regions. *J. Geophys. Res.*, 117, E00H04, doi:10.1029/2011JE003913.
35. Hendrix, A. R. T. A. Cassidy, B. J. Buratti, C. Paranicas, C. J. Hansen, B. Teolis, E. Roussos, E. T. Bradley, P. Kollmann, R. E. Johnson 2012. Mimas' far-UV albedo: Spatial variations. *Icarus* 220: 922-931.
36. Hendrix, A. R., K. D. Retherford, G. R. Gladstone, D. M. Hurley, P. D. Feldman, A. F. Egan, D. E. Kaufmann, P. F. Miles, J. W. Parker, D. Horvath, P. M. Rojas, M. H. Versteeg, M. W. Davis, T. K. Greathouse, J. Mukherjee, A. J. Steffl, W. R. Pryor, S. A. Stern 2012. The Lunar Far-UV Albedo: Indicator of Hydration and Weathering. *J. Geophys. Res.* 117: E12001, doi:10.1029/2012JE004252
37. Hurley, D. M., G. R. Gladstone, S. A. Stern, K. D. Retherford, P. D. Feldman, W. Pryor, A. F. Egan, T. K. Greathouse, D. E. Kaufmann, A. J. Steffl, J. W. Parker, P. F. Miles, D. Horvath, M. W. Davis, M. H. Versteeg, D. C. Slater, A. R. Hendrix, C. A. Hibbitts, C. M. Ernst, R. J. Vervack, G. A. Grieves 2012. Modeling of the vapor release from the LCROSS impact: 2. Observations from LAMP. *J. Geophys. Res.* 10.1029/2011JE003841
38. Paranicas, C. E. Roussos, N. Krupp, P. Kollmann, A.R. Hendrix, T. Cassidy, R.E. Johnson, P. Schenk, G. Jones, J. Carbary, D.G. Mitchell, K. Dialynas 2012. Energetic charged particle weathering of Saturn's inner satellites. *Planet Space Sci* 61, 60-65
39. Cassidy, T. A., C. P. Paranicas, J. H. Shirley, J. B. Dalton III, B. D. Teolis, R. E. Johnson, L. Kamp, A. R. Hendrix 2013. Magnetospheric ion sputtering and water ice grain size at Europa. *Planet. Space Sci.* 77: 64-73.
40. Paranicas, C., E. Roussos, R. B. Decker, R. E. Johnson, A. R. Hendrix, P. Schenk, P. Kollmann, T. Cassidy, J. B. Dalton, W. Patterson, K. Hand, T. Nordheim, C. J. A. Howett, N. Krupp, and D. G. Mitchell 2014. The lens feature on the Saturnian satellites. *Icarus* 234: 155-161.
41. Royer, E. M. and A. R. Hendrix 2014. First far-ultraviolet disk-integrated phase curve analysis of Mimas, Tethys and Dione from the Cassini-UVIS data sets. *Icarus*, 242, 158-171.
42. Shemansky, D. E., Y. L. Yung, X. Liu, J. Yoshii, C. J. Hansen, A. R. Hendrix, L. W. Esposito 2014. A New Understanding of the Europa Atmosphere and Limits on Geophysical Activity *Astrophys. J.*, v. 797, article ID 84.

43. Hayne, P. O., A. R. Hendrix, E. Sefton-Nash, P. G. Lucey, K. D. Retherford, J.-P. Williams, M. A. Siegler, B. T. Greenhagen, D. A. Paige. 2015. Evidence for Exposed Water Ice in the Moon's South Polar 1 Regions from Lunar Reconnaissance Orbiter Ultraviolet Albedo and Temperature Measurements. *Icarus*, 255, 58-69.
44. Vilas, F. and A. R. Hendrix 2015. The UV/blue effects of space weathering manifested in S-complex asteroids I: Quantifying change with asteroid age, *Astron. J.* 150: 64-78.
45. Vilas, F., A. R. Hendrix, E. Jensen 2015. The UV/Blue Effects of Space Weathering Manifested in S-Complex Asteroids II: Probing for Less-Weathered Objects in the Solar System. *Planet. Space Sci.* 118: 273-276.
46. Mandt, K. E. T. K. Greathouse, K. D. Retherford, G. R. Gladstone, A. P. Jordan, M. Lemelin, S. D. Koeber, E. Bowman-Cisneros, G. W. Patterson, M. Robinson, P. G. Lucey, A. R. Hendrix, D. Hurley, A. M. Stickle, W. Pryor 2016. LRO-LAMP detection of geologically young craters within lunar permanently shaded regions. *Icarus* 273, 114-120.
47. Hurley, D. M., Jason C. Cook, Kurt D. Retherford, Thomas Greathouse, G. Randall Gladstone, Kathleen Mandt, Cesare Grava, David Kaufmann, Amanda Hendrix, Paul D. Feldman, Wayne Pryor, Angela Stickle, Rosemary M. Killen, S. Alan Stern. 2017. Contributions of solar wind and micrometeoroids to molecular hydrogen in the lunar exosphere. *Icarus* 283, p. 31-37
48. Hendrix, A. R., F. Vilas, J.-Y. Li 2016 The UV Signature of Carbon in the Solar System *Meteoritics & Planetary Science* 51, 105
49. Hendrix, A.R., T. K. Greathouse, K. D. Retherford, K. E. Mandt, G. R. Gladstone, D. E. Kaufmann, D. M. Hurley, P. D. Feldman, W. R. Pryor, S. A. Stern. 2016. Lunar swirls: Far-UV characteristics. *Icarus* 273, 68-74.
50. Vilas, F. and A. R. Hendrix 2016. Space Weathering of S-Complex Asteroids Manifested in the UV/Blue: Recent Insights and Future Directions. Proceedings of the International Astronomical Union, IAU Symposium, Volume 318, pp. 201-205
51. Domingue D. L., Faith Vilas, Teck Choo, Karen R. Stockstill-Cahill, Joshua T. S. Cahill, Amanda R. Hendrix 2016. Regional Spectrophotometric Properties of 951 Gaspra, *Icarus* 280, 340-358
52. Cuzzi, J. C., L. Chambers, A. R. Hendrix 2017. Rough Surfaces: is the dark stuff just shadow? *Icarus* 289, 281-294.
53. Hendrix, A. R., F. Vilas, and J.-Y. Li (2016), Ceres: Sulfur deposits and graphitized carbon, *Geophys. Res. Lett.* , 43, doi:10.1002/2016GL070240.

54. Hansen, C. J., L. W. Esposito, K.-M. Aye, J. E. Colwell, A. R. Hendrix, G. Portyankina, D. Shemansky 2017. Investigation of diurnal variability of water vapor in Enceladus' plume by the Cassini ultraviolet imaging spectrograph, GRL 44 doi:10.1002/2016GL071853.
55. Nordheim, T. A., K.P. Hand, C. Paranicas, C. J. A. Howett, A. R. Hendrix, G.H. Jones, A. J. Coates 2017. The near-surface electron radiation environment of Saturn's moon Mimas. *Icarus*, Volume 286, p. 56-68
56. Hendrix, A. R. and Y. Yung 2017. Energy options for future humans on Titan. *J. Astrobiol. Outreach*, vol 5 issue 2 2017; doi:10.4172/2332-2519.1000157
57. Hendrix, A. R., G. Filacchione, C. Paranicas, P. Schenk, F. Scipioni 2018. Icy saturnian satellites: Disk-integrated UV-IR spectral characteristics and links to exogenic processes. *Icarus* 300, 103-114.
58. Buratti B. J., R. N. Clark, F. Crary, C. J. Hansen, A. R. Hendrix, C. J. A. Howett, J. Lunine, C. Paranicas 2018. Cold Cases: What we don't know about Saturn's Moons. *Planetary and Space Science*, Volume 155, p. 41-49
59. Paranicas, C., C. A. Hibbitts, P. Kollmann, N. Ligier, E. Roussos, N. Krupp, A. R. Hendrix, T. A. Nordheim, D. Blaney, T. A. Cassidy, G. Clark 2018. Magnetospheric considerations for solar system ice state. *Icarus*, Volume 302, p. 560-564
60. Applin, D. M., M. R. M. Izawa, E. A. Cloutis, J. Gillis-Davis, K. Pitman, T. L. Roush, A. R. Hendrix, P. G. Lucey 2018. Ultraviolet spectral reflectance of carbonaceous phases and applications to remote sensing of planetary surfaces. *Icarus*, Volume 307, p. 40-82
61. Cuzzi, J. C, R. G. French, A. R. Hendrix, D. M. Olson, T. Roush, S. Vahidinia 2018 HST-STIS spectra and the Redness of Saturn's Rings. *Icarus*, Volume 309, p. 363-388
62. Buratti, B. J. R.N. Clark, F. Crary, C.J. Hansen, A.R. Hendrix, C.J.A. Howett, J. Lunine, C. Paranicas 2019. Cold cases: What we don't know about Saturn's Moons. *Planetary and Space Science*, Volume 155, p. 41-49.
63. Becker, T. M., K. D. Retherford, L. Roth, A. R. Hendrix, M. A. McGrath, J. Saur 2018. The Far-UV Albedo of Europa from HST Observations. *Journal of Geophysical Research: Planets*, Volume 123, Issue 5, pp. 1327-1342
64. Raut, U., P. L. Karnes, K. D. Retherford, M. W. Davis, Y. Liu, G.R. Gladstone, E.L. Patrick, Thomas K. Greathouse, A. R. Hendrix, P. Mokashi 2018. Far-Ultraviolet Photometric Response of Apollo Soil 10084. *Journal of Geophysical Research: Planets*, Volume 123, Issue 5, pp. 1221-1229
65. Buratti, B. J., C. J. Hansen, A. R. Hendrix, L. W. Esposito, J. A. Mosher 2018. The Search for Activity on Dione and Tethys with *Cassini* VIMS and UVIS. *Geophysical Research Letters*, Volume 45, Issue 12, pp. 5860-5866

66. Liu, Y., K. D. Retherford, T. K. Greathouse, A. R. Hendrix, J. T. S. Cahill, K. E. Mandt, G. R. Gladstone, C. Grava, A. F. Egan, D. E. Kaufmann, W. R. Pryor 2018. The Far Ultraviolet Wavelength Dependence of the Lunar Phase Curve as seen by LRO LAMP. *JGR Planets*, Volume 123, Issue 10, pp. 2550-2563
67. Hendrix, A. R. and 25 co-authors. The NASA Roadmap to Ocean Worlds. *Astrobiology*, Vol 19, Issue 1, 2019, pp.1-27
68. Cahill, J.T.S., Anna Wirth, Amanda R. Hendrix, Kurt D. Retherford, Thomas K. Greathouse, Kathleen E. Mandt, Yang Liu, Benjamin T. Greenhagen, Brett W. Denevi, Angela M. Stickle, and Dana M. Hurley. An examination of several discrete lunar photometric anomalies observed in Lyman-alpha. *Journal of Geophysical Research: Planets*, 123. doi: 10.1029/2018JE005754
69. Byron, B. D., K. D. Retherford, T. K. Greathouse, K. E. Mandt, A. R. Hendrix, M. J. Poston, Y. Liu, J. T. Cahill, E. Mazarico. Effects of Space Weathering and Porosity on the Far-UV Reflectance of Amundsen Crater. *Journal of Geophysical Research: Planets*, Volume 124, Issue 3, pp. 823-836
70. Hendrix, A. R., D. M. Hurley, W. Farrell, B. T. Greenhagen, P. O. Hayne, K. D. Retherford, F. Vilas, J. T. S. Cahill, J. J. Poston 2019. Diurnally-Migrating Lunar Water: Evidence from Ultraviolet Data. *Geophys. Res. Lett.* Volume 46, Issue 5, pp. 2417-2424
71. Buratti, B., P. C. Thomas, E. Roussos, C. Howett, M. Seiß, A. R. Hendrix, P. Helfenstein, R. H. Brown, R. N. Clark, T. Denk, G. Filacchione, H. Hoffmann, G. Jones, N. Khawaja, P. Kollmann, N. Krupp, J. Lunine, T. S. Momary, C. Paranicas, F. Postberg, M. Sachse, F. Spahn, J. Spencer, R. Srama, T. Albin, K. H. Baines, M. Ciarniello, T. Economou, J. Hsu, S. Kempf, S. M. Krimigis, D. Mitchell, G. Moragas-Klostermeyer, P. D. Nicholson, C. C. Porco, H. Rosenberg, J. Simolka, L. A. Soderblom First results from Cassini's Five Fabulous Flybys of Saturn's Ring Moons, *Science* 14 Jun 2019 Vol. 364, Issue 6445
72. Hansen, C. J., L. W. Esposito, A. R. Hendrix. Ultraviolet observations of Enceladus' plume in transit across Saturn, compared to Europa. *Icarus*, Volume 330, p. 256-260
73. Hendrix, A. R. and F. Vilas 2019. C-complex asteroids: UV-visible spectral characteristics and implications for space weathering effects. *Geophys. Res. Lett.*, 46. <https://doi.org/10.1029/2019GL085883>
74. Castillo-Rogez, J. et al. Ceres: Astrobiological Target and Possible Ocean World. 2020. *Astrobiology* 20, DOI: 10.1089/ast.2018.1999
75. Hansen, C. J., Ian Stewart, Larry Esposito, Ganna Portyankina, Joshua Colwell, Robert West, Amanda Hendrix 2020. The Composition and Structure of Enceladus' Plume from the complete set of Cassini UVIS Occultation Observations. *Icarus*, Volume 344, p. 256-260.

76. Byron, B., K. Retherford, T. Greathouse, D. Wyrick, J. T. Cahill, A. R. Hendrix, U. Raut, K. Mandt, B. Denevi 2020. Far-UV Observations of Lunar Rayed Craters with LRO-LAMP, *Journal of Geophysical Research* Volume 125, Issue 3, article id. e06269.
DOI: 10.1029/2019JE006269
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Mission & Instrument Design & Proposal Experience

PRISM proposal, LavaBug, PI, 2022

PRISM proposal, Lunar Mineralogy and Surface Hydration Package (MaSH), PI, 2021

Persephone, Pluto mission Planetary Mission Concept Study, 2020, co-I

Ceres lander/sample return Planetary Mission Concept Study, 2020, co-I

Discovery concept, Primitive Asteroid eXplorer (PAX), PI, 2018

ASTRO-1 Space Telescope Requirements Team (ART), 2015-2016
Asteroid Retrieval Mission (ARM) Formulation Assessment and Support Team (FAST) 2015
Europa instrument proposal, Plume Reconnaissance & UV Explorer (PRUVE), PI, 2014-2015
Discovery proposal, Kuiper Space Telescope, co-I, 2014
New Approaches to Lunar Ice Detection and Mapping, Keck Institute for Space Studies (KISS), 2013-2014
In Situ Science and Instrumentation for Primitive Bodies, Keck Institute for Space Studies (KISS), 2012-2013
Study on Applications of Large Space Optics (SALSO), Telescope for Planetary Science (TPS), PI, 2012-2013
Enabling Technologies for Next Generation Ultraviolet Astrophysics, Planetary, and Heliospheric Missions, Keck Institute for Space Studies (KISS), 2009, 2010
Europa Orbiter of the Jupiter Joint Science Definition Team, Deputy Study Scientist February 2008-April 2009
ARGO – a New Frontiers concept, co-I, 2008
Jovian System Orbiter Science Definition Team, 2007
Lucy Discovery proposal, 2010, co-I
Ganymede Orbiter Science Definition Team

Professional Societies, Committees, Service

Explore Titan, Inc., Board of Directors President, 2023-
HST cycle 29 TAC, chair of solar system panel, 2021
JWST cycle 1 solar system panel, 2021
Science Organizing Committee (SOC), "Rock, Dust and Ice: Interpreting planetary data" online workshop, March 23-26 2021
NASA Planetary Missions Senior Review panel member, May 6-8 2019
SOC, 2019 MOP meeting
Ceres Science Definition Team, 2018
Science with HabEx community workshop, Oct 2018
HST TAC Cycle 26, Oct 2018
AAS Strategic Assembly Steering Committee 2018-
LPSC SOC, 2018
SOC, Boulder Cassini Symposium 2018
DPS Federal Relations Subcommittee, 2017-
HST Europa Advisory Committee, 2017
Enceladus and the Icy Moons of Saturn Meeting SOC, 2016
PDS Small Bodies Node review panel, 2015
Barth Symposium program committee, 2015
DPS 2016 LOC, SOC
American Geophysical Union (AGU) member
American Astronomical Society (AAS), Division of Planetary Sciences (DPS) member
International Astronomical Union (IAU) member
Magnetospheres of the Outer Planets (MOP) 2013 Science Organizing Committee
DPS 2012 Science Organizing Committee (SOC) member
LPSC Program Committee (2009, 2012)
AGU Fall meeting special session organizer and chair (e.g., 2007, 2012, 2013, 2014...)

DPS 2010 Meeting Local Organizing Committee (chair) & SOC member
London Cassini icy satellites meeting co-organizer (July 2009)
NASA proposal reviewer (numerous programs)
AAS Congressional Visits Day, DPS representative, March 4-5 2008
NOAO Solar System TAC May 2008-May 2010
LRO LAMP PDS Review panel October – November 2007
AAS/DPS Nominating Subcommittee October 2007-2010
Hubble Space Telescope proposal review panel, 2003, 2007, 2010.
DPS 2006 meeting SOC & LOC member
AGU Index Terms Committee (2004) - Planetary Sciences representative