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List of Publications and Presentations

2017

Non-Refereed Publications

146. Nancy C. Maryboy, Jill Stein, David Begay, Laura Peticolas, Sharing Diverse Worldviews: Equity and Inclusion in Science Centers and Museums. Association of Science and Technology Centers. *Dimensions Edited by Emily Schuster. Washington, D.C., Association of Technology and Science Centers*, Vol 18, no. 5, p.56-62, 2017

Other: Invited Talks

145. Peticolas, Laura; Eclipse Megamovie; *TEDxJacksonHole Out of the Darkness, 2017*
<http://www.tedxjacksonhole.org/2017-out-of-darkness.html>

Other: Presentations and Published Abstracts

144. Peticolas, Laura; Eclipse Megamovie; *American Meteorological Society Conference Abstract*; 2017.
143. Peticolas, Laura; Cable, Chris; Eclipse Megamovie Awareness Tour Town Halls; Georgetown, SC; Clemson, SC; Cherokee, NC, February 19-24th;
142. Peticolas, Laura; Cable, Chris; Eclipse Megamovie Awareness Tour Town Halls; Brevard, NC; Cookville, TN; Hopkinsville, KY, March 24-29;
141. Peticolas, Laura; Cable, Chris; Eclipse Megamovie Awareness Tour Town Halls; Victor, ID; Hailey, ID; Weiser, ID; Boise, ID, May 8-12th;
140. Peticolas, Laura; Cable, Chris; Eclipse Megamovie Awareness Tour Town Halls; Kansas City, MO; Gering, NE; North Platte, NE; Grande Island, NE; Ashland, NE, June, 23-29th; 2017.

2016

Other: Invited Talks

139. Peticolas, Laura and Robin Higdon; Linda Shore Moderator: Discussion Panel: Technology and the 2017 Solar Eclipse: Engage Every Child in the 2017 Solar Eclipse: Working Together with Diverse and Underserved Communities Across America, ASP Annual Meeting, 2016.

Other: Conference/Workshop Proceedings

138. Shupla, C., Bialeschki, D., Buxner, S., Felske, L., Foxworth, S., Graff, P., Peticolas, L., Shaner, A., Smith Hackler, A., Partnering to Enhance Education and Public Engagement Programs, *Lunar and Planetary Science Conference, V 47*, p. 1598, 2016

Other: Presentations and Published Abstracts

137. Peticolas, L. M., Hudson, H. S., Martinez Oliveros, J. C., Johnson, C., Zevin, D., Krista, L. D., Bender, M., McIntosh, S. W., Konerding, D., Koh, J., Pasachoff, J., Lorimore, B., Jiang, G., Storksdieck, M., Yan, D., Shore, L., Fraknoi, A., Filippenko, A., Eclipse Megamovie: Solar Discoveries, Education, and Outreach through Crowdsourcing 2017 Eclipse Images, *AGU Fall Meeting Abstracts*, 2016
136. Hudson, H. S., McIntosh, S. W., Martinez Oliveros, J. C., Pasachoff, J. M., Peticolas, L. M., Bender, M., Eclipse Megamovie Citizen Science: The Diamond Ring, *AGU Fall Meeting Abstracts*, 2016
135. Williams, A. A., Immel, T. J., Maute, A. I., Peticolas, L. M., T Global Effects of Neutral Wind Variability in the E and F Region Ionosphere, vol. 53, *AGU Fall Meeting Abstracts*, 2016
134. Peticolas, L.M., Bender, M., Yan, D., Eclipse Megamovie Awareness Tour Town Halls, Lincoln City, OR; Corvallis, OR; Madras, OR; John Day, OR, August 1-5th, 2017.

2015

Other: Conference/Workshop Proceedings

133. National Research Council. Laura Peticolas, PANEL DISCUSSION WITH NASA SMD'S EDUCATION FORUM LEADS, pg. 10, *Sharing the Adventure with the Student: Exploring the Intersections of NASA Space Science and Education: A Workshop Summary. Washington, DC: The National Academies Press. <https://doi.org/10.17226/21751>*, 2015

Other: Presentations and Published Abstracts

132. Buxner, Sanlyn; Grier, Jennifer; Schneider, Nick; Manning, James G; Schultz, Gregory; Low, Rusty; Gross, Nick; Shipp, Stephanie; Smith, Denise Anne; Schwerin, Theresa; Peticolas, Laura, Supporting Space Scientists to Engage in Education and Public Outreach Using NASA Resources, IAU General Assembly 29, 2015
131. Smith, Denise Anne; Peticolas, Laura; Schwerin, Theresa; Shipp, Stephanie; Lawton, Brandon L; Meinke, Bonnie; Manning, James G; Bartolone, Lindsay; Schultz, Gregory, NASA Science Mission Directorate Science Education and Public Outreach Forums: A Six-Year Retrospective, IAU General Assembly 29, 2015
130. Peticolas, LM; Raftery, CL; Mendez, B; Paglierani, R; Ali, NA; Zevin, D; Frappier, R; Hauck, K; Shackelford III, RL; Yan, D; Multiverse: Increasing Diversity in Earth and Space Science Through Multicultural Education, *AGU Fall Meeting Abstracts*, 2015
129. Raftery, CL; Davis, HB; Peticolas, LM; Paglierani, R; Advancing Space Sciences through Undergraduate Research Experiences at UC Berkeley's Space Sciences Laboratory-a novel approach to undergraduate internships for first generation community college students, *AGU Fall Meeting Abstracts*, 2015
128. Porcello, D; Peticolas, LM; Schwerin, TG; How can the curation of hands-on STEM activities power successful mobile apps and websites? *AGU Fall Meeting Abstracts*, 2015

127. Ali, NA; Paglierani, R; Raftery, CL; Romero, V; Harper, MR; Chilcott, C; Peticolas, LM; Hauck, K; Yan, D; Ruderman, I; Connecting Scientists, College Students, Middle School Students & Elementary Students through Intergenerational Afterschool STEM Programming, AGU Fall Meeting Abstracts, 2015

2014

Non-Refereed Publications

126. Nancy C. Maryboy, David Begay, Laura Peticolas, Jill Stein, and Ashley C. Teren, Hane' (Story): Using Cross Cultural Understanding to Facilitate Science Learning in Museums, *Dimension*, July/August 2014. Edited by Emily Schuster. Washington, D.C., Association of Technology and Science Centers, p. 51.

Other: Invited Talks

125. Peticolas, Laura; The Many Paths Possible with a Physics Degree, *Bulletin of the American Physical Society*, vol. 59, 2014
124. Peticolas, Laura; Discussion Panel: NASA Education Forum Leads - Laura Peticolas, Sharing the Adventure with the Student: Exploring the Intersections of NASA Space Science and Education: A Workshop, *National Academies of Science, Engineering, Medicine Space Studies Board, Division on Engineering and Physical Sciences*, 2014.

Other: Conference/Workshop Proceedings

123. Bartolone, L; Nichols-Yehling, M; Peticolas, L; Schultz, G; Smith, D; Schwerin, T; Shipp, S, Reflecting and Strategizing about Measuring EPO Impact, Ensuring Stem Literacy: A National Conference on STEM Education and Public Outreach, vol. 483, pg. 157, 2014
122. Fillingim, M; Brain, D; Peticolas, L; Yan, D; Fricke, K; Thrall, L, Magnetic Mystery Planets Ensuring Stem Literacy: A National Conference on STEM Education and Public Outreach, vol. 483, pg. 303, 2014
121. Smith, DA; Peticolas, L; Schwerin, T; Shipp, S; Manning, JG; Science and Science Education Go Hand-in-Hand: The Impact of the NASA Science Mission Directorate Education and Public Outreach Program, Ensuring Stem Literacy: A National Conference on STEM Education and Public Outreach, vol. 483, pg. 9, 2014

Other: Presentations and Published Abstracts

120. Jones, AJP; Hsu, BC; Bleacher, LV; Alima Ali, N; Hauck, K; Peticolas, L, Invisible Mars: The MAVEN Education and Public Outreach Science on a Sphere Program, Lunar and Planetary Science Conference, vol. 45, pg. 2691, 2014
119. Grier, JA; Buxner, SR; Hsu, B; Shupla, C; Dalton, H; Meinkie, B; Peticolas, L, Engaging Scientists in NASA Education and Public Outreach: Resources and Tools for Scientists, Lunar and Planetary Science Conference, vol. 45, pg. 2087, 2014
118. Dalton, HA; Shipp, SS; Bartolone, L; Schwerin, T; Peticolas, L; Meinke, B; Buxner, S; Grier, J; Tools for Scientist Engagement in E/PO: NASA SMD Online Community Workspace, Lunar and Planetary Science Conference, vol. 45, pg. 2965, 2014
117. Smith, Denise A; Peticolas, L; Schwerin, T; Shipp, S, The NASA SMD Science Education and Public Outreach Forums: Engaging Scientists in NASA Education and Public Outreach, American Astronomical Society Meeting Abstracts# 223, 2014

116. Smith, Denise A; Peticolas, Laura; Schwerin, Theresa; Shipp, Stephanie, NASA SMD Science Education and Public Outreach Forums: A Five-Year Retrospective, American Astronomical Society Meeting, Abstracts# 224, 2014
115. Shipp, Stephanie; Bartolone, Lindsay; Peticolas, Laura; Woroner, Morgan; Dalton, Heather; Schwerin, Theresa; Smith, Denise; Online Workspace to Connect Scientists with NASA's Science E/PO Efforts and Practitioners, AAS/Division for Planetary Sciences Meeting Abstracts, 46, 2014
114. Dalton, H; Shipp, SS; Grier, J; Gross, NA; Buxner, S; Bartolone, L; Peticolas, LM; Woroner, M; Schwerin, TG, Tools for Scientist Engagement in E/PO: NASA SMD Community Workspace and Online Resources, AGU Fall Meeting Abstracts, 2014
113. Mason, T; Peticolas, LM; Wood, EL, Communicating the Science of NASA's MAVEN Mission through Public Engagement, AGU Fall Meeting Abstracts, 2014
112. Schwerin, TG; Peticolas, LM; Shipp, SS; Smith, DA, Building Effective Scientist-Educator Communities of Practice: NASA's Science Education and Public Outreach Forums, AGU Fall Meeting Abstracts, 2014
111. Raftery, CL; Paglierani, R; Shackelford III, RL; Peticolas, LM; Frappier, R; Mendez, B, Tackling diversity challenges in Geoscience with the "Advancing Space Science Undergraduate Research Experience"(ASSURE) program at UC Berkeley's Space Sciences Laboratory, AGU Fall Meeting Abstracts, 2014

2013

Other: Conference/Workshop Proceedings

110. Ali, N. A.; Peticolas, L.; Fricke, K.; Yan, D., Creating a "Heliophysics Community of Practice" for Formal Educators, *Communicating Science: A National Conference on Science Education and Public Outreach. Proceedings of a Conference held at Tucson, Arizona, USA 4-8 August 2012. Edited by J. Barnes, C. Shupla, J.G. Manning and M.G. Gibbs. San Francisco: Astronomical Society of the Pacific, p.327, 2013.*
109. Fillingim, M.; Brain, D. A.; Peticolas, L. M.; Yan, D.; Fricke, K.; Thrall, L., Wet Mars, Dry Mars, *Communicating Science: A National Conference on Science Education and Public Outreach. Proceedings of a Conference held at Tucson, Arizona, USA 4-8 August 2012. Edited by J. Barnes, C. Shupla, J.G. Manning and M.G. Gibbs. San Francisco: Astronomical Society of the Pacific, p.233, 2013.*
108. Shupla, C.; Buxner, S.; Peticolas, L. M.; Mendez, B.; Acevedo, S.; Begay, D.; Higgins, M. L.; Norman, D., Engaging and Supporting Culturally Diverse Audiences, *Communicating Science: A National Conference on Science Education and Public Outreach. Proceedings of a Conference held at Tucson, Arizona, USA 4-8 August 2012. Edited by J. Barnes, C. Shupla, J.G. Manning and M.G. Gibbs. San Francisco: Astronomical Society of the Pacific, p.61, 2013.*

Other: Presentations and Published Abstracts

107. Peticolas, LM; Gross, NA; Hsu, BC; Shipp, SS; Buxner, S; Schwerin, TG; Smith, D; Meinke, BK; Avenues for Scientist Involvement in Earth and Space Science Education and Public Outreach, *AGU Fall Meeting Abstracts, 2013*
106. Schwerin, TG; Shipp, SS; Peticolas, LM; Smith, D; Science and Science Education Go Hand-in-Hand: The Impact of the NASA Science Mission Directorate Education and Public Outreach Program, *AGU Fall Meeting Abstracts, 2013*
105. Shipp, SS; Buxner, S; Schwerin, TG; Hsu, BC; Peticolas, LM; Smith, D; Meinke, BK; Get Involved in Education and Public Outreach! The Science Mission Directorate Science E/PO Forums Are Here to Help, *AGU Fall Meeting Abstracts, 2013*

104. Smith, DA; Schwerin, TG; Peticolas, LM; Porcello, D; Kansa, E; Shipp, SS; Bartolone, L; NASA Wavelength: A Full Spectrum of NASA Resources for Earth and Space Science Education, *AGU Fall Meeting Abstracts, 2013*
103. Gross, NA; Buxner, S; Cobabe-Ammann, EA; Fraknoi, A; Moldwin, M; Peticolas, LM; Low, R; Schultz, GR; Incorporating Space Science Content Into the Undergraduate Curriculum by the NASA Education Forums' Higher Education Working Group, *AGU Fall Meeting Abstracts, 2013*
102. Fillingim, MO; Brain, DA; Peticolas, LM; Yan, D; Fricke, KW; Thrall, L; Magnetic Mystery Planets, *AGU Fall Meeting Abstracts, 2013*
101. Buxner, S; Hsu, BC; Meinke, BK; Shipp, SS; Schwerin, TG; Peticolas, LM; Smith, D; Dalton, H; We Need You! The Importance of Scientist Involvement in Education and Public Outreach (E/PO), *AGU Fall Meeting Abstracts, 2013*
100. Smith, Denise A; Bartolone, L; Eisenhamer, B; Lawton, BL; Schultz, GR; Peticolas, L; Schwerin, T; Shipp, S; *Catalyzing Effective Science Education: Contributions from the NASA Science Education and Public Outreach Forums, American Astronomical Society Meeting Abstracts #222, 2013*

2012

Refereed Publications

99. Fillingim, M. O.; Lillis, R. J.; England, S. L.; Peticolas, L. M.; Brain, D. A.; Halekas, J. S.; Paty, C.; Lummerzheim, D.; Bougher, S. W., On wind-driven electrojets at magnetic cusps in the nightside ionosphere of Mars, *Earth, Planets and Space, Volume 64, Issue 2, p. 93-103, 2012.*

Books

98. Maryboy, Nancy C., David Begay, Laura Peticolas, Jill Stein, and Shelly Valdez. Cosmic Serpent: Collaborating with Integrity, Indigenous Education Institute, Friday Harbor, WA, ISBN 13: 978-098598870-8, 2012

Other: Invited Talks

97. Peticolas, Laura and Chuck Striplen, Tribal & Scientist Identities, TEDxConstitutionDrive, <https://www.youtube.com/watch?v=cuUGgVxL2Mo>, 2012.

Other: Conference/Workshop Proceedings

96. Peticolas, L.; Maryboy, N.; Begay, D.; Stein, J.; Valdez, S.; Paglierani, R., A Place of Transformation: Lessons from the Cosmic Serpent Informal Science Education Professional Development Project, *Connecting People to Science: A National Conference on Science Education and Public Outreach. Proceedings of a conference held at Baltimore, Maryland USA 30 July - 3 August 2011. ASP Conference Series, Vol. 457. Edited by J.B. Jensen, J.G. Manning, M.G. Gibbs, and D. Daou. San Francisco: Astronomical Society of the Pacific, p.321, 2012.*
95. Buxner, S. R.; Sharma, M.; Hsu, B.; Peticolas, L.; Nova, M. A. M.; CoBabe-Ammann, E., Barriers, Lessons Learned, and Best Practices in Engaging Scientists in Education and Public Outreach, *Connecting People to Science: A National Conference on Science Education and Public Outreach. Proceedings of a conference held at Baltimore, Maryland USA 30 July - 3 August 2011. ASP Conference Series, Vol. 457. Edited by J.B. Jensen, J.G. Manning, M.G. Gibbs, and D. Daou. San Francisco: Astronomical Society of the Pacific, p.81, 2012.*

94. Bartolone, L.; Nichols, M.; Withnell, H.; Ali, N. A.; Mendez, B.; Paglierani, R.; Peticolas, L., NASA Heliophysics Education and Public Outreach Forum Product Analysis Effort, *Connecting People to Science: A National Conference on Science Education and Public Outreach. Proceedings of a conference held at Baltimore, Maryland USA 30 July - 3 August 2011. ASP Conference Series, Vol. 457. Edited by J.B. Jensen, J.G. Manning, M.G. Gibbs, and D. Daou. San Francisco: Astronomical Society of the Pacific, p.309, 2012.*
93. Fillingim, M.; Brain, D.; Peticolas, L.; Yan, D.; Fricke, K.; Nova, M. A. M.; CoBabe-Ammann, E., Barriers, Visualizing Planetary Magnetic Fields (and Why You Should Care), *Connecting People to Science: A National Conference on Science Education and Public Outreach. Proceedings of a conference held at Baltimore, Maryland USA 30 July - 3 August 2011. ASP Conference Series, Vol. 457. Edited by J.B. Jensen, J.G. Manning, M.G. Gibbs, and D. Daou. San Francisco: Astronomical Society of the Pacific, p.235, 2012.*

Other: Presentations and Published Abstracts

92. Peticolas, L. M.; Bartolone, L. M.; Cobabe-Ammann, E. A.; Paglierani, R.; Mendez, B. J.; Nichols, M.; Davis, H.; Ali, N. A., Learn about effective collaboration processes, tools and outcomes for science education professionals and scientists: NASA's Heliophysics Science Education and Public Outreach Forum, *American Geophysical Union, Fall Meeting 2012, abstract #ED53C-0931*
91. Schwerin, T.; Peticolas, L. M.; Bartolone, L. M.; Davey, B.; Porcello, D., NASA Wavelength: A Digital Library for Earth and Space Science Education, *American Geophysical Union, Fall Meeting 2012, abstract #ED21A-0712*
90. Fillingim, M. O.; Brain, D. A.; Peticolas, L. M.; Yan, D.; Fricke, K. W.; Thrall, L., Wet Mars, Dry Mars, *American Geophysical Union, Fall Meeting 2012, abstract #ED21A-0697*
89. Buxner, S.; Cobabe-Ammann, E. A.; Hsu, B. C.; Sharma, M.; Peticolas, L. M.; Schwerin, T. G.; Shipp, S. S.; Smith, D., NASA's SMD Cross-Forum Resources for Supporting Scientist Engagement in Education and Public Outreach Activities, *American Geophysical Union, Fall Meeting 2012, abstract #ED53E-0945*
88. Hudson, H. S.; Davey, A. R.; Ireland, J.; Jones, L.; McIntosh, S. W.; Paglierani, R.; Pasachoff, J. M.; Peticolas, L. M.; Russell, R. M.; Suarez Sola, F. I.; Sutherland, L.; Thompson, M. J., A Coral Sea Rehearsal for the Eclipse Megamovie, *American Geophysical Union, Fall Meeting 2012, abstract #SH11C-06, 2012*
87. Fillingim, Matthew; Brain, D.; Peticolas, L.; Yan, D.; Fricke, K.; Thrall, L. Wet Mars, Dry Mars, *American Astronomical Society, DPS meeting #44, #411.12, 2012.*

2011

Non-Refereed Publications

86. Maryboy, Nancy C., David Begay, Laura Peticolas, Jill Stein, and Shelly Valdez Collaborating with Integrity: Reflections from Cosmic Serpent, *Working Across Worldviews: Traditional Knowledge and Western Science, Dimension, November/December 2011. Edited by Emily Schuster. Washington, D.C., Association of Technology and Science Centers, p. 22.*

Other: Invited Talks

85. Peticolas, L. M., Multiple Perspectives on the Topic of Scientists and Education and Public Outreach, American Geophysical Union, Fall Meeting 2011, abstract #ED31C-04, 2011

Other: White Paper Publications

84. Hudson, Hugh S.; McIntosh, Scott W.; Habbal, Shadia R.; Pasachoff, Jay M.; Peticolas, Laura, The U.S. Eclipse Megamovie in 2017: a white paper on a unique outreach event, eprint arXiv:1108.3486, (http://sprg.ssl.berkeley.edu/adminstuff/webpubs/2011_eprint_x7.pdf), 2011
Press about this white paper
- <https://www.wired.com/2011/09/2017-eclipse-movie/>
 - [http://www.dailykos.com/story/2011/09/11/1015476/-Overnight-News-Digest:-Science-Saturday-\(10th-Anniversary-of-9-11-edition\)](http://www.dailykos.com/story/2011/09/11/1015476/-Overnight-News-Digest:-Science-Saturday-(10th-Anniversary-of-9-11-edition))
 - <https://weareallinthegutter.wordpress.com/2011/08/19/making-an-eclipse-megamovie-in-2017/>

Other: Conference/Workshop Proceedings

83. Peticolas, L. M.; Maryboy, N.; Begay, D.; Paglierani, R.; Frappier, R.; Teren, A., Lessons Learned from Cosmic Serpent: A Professional Development Project for Informal Educators on Science and Native Ways of Knowing, *Earth and Space Science: Making Connections in Education and Public Outreach. Proceedings of a conference held at the University of Colorado, Boulder, Colorado, USA 31 July-4 August 2010. Edited by Joseph B. Jensen, James G. Manning, and Michael G. Gibbs. San Francisco: Astronomical Society of the Pacific, p.291, 2011.*
82. Fillingim, M.; Brain, D.; Peticolas, L.; Yan, D. Goldilocks and the Three Planets, *Earth and Space Science: Making Connections in Education and Public Outreach. Proceedings of a conference held at the University of Colorado, Boulder, Colorado, USA 31 July-4 August 2010. Edited by Joseph B. Jensen, James G. Manning, and Michael G. Gibbs. San Francisco: Astronomical Society of the Pacific, p.233, 2011.*

Other: Presentations and Published Abstracts

81. Peticolas, L. M.; Bean, J.; Walker, A., Magnetometer Data in the Classroom as a part of the NASA THEMIS Satellite Mission, *American Geophysical Union, Fall Meeting 2011, abstract #ED33C-02*
80. Nichols, M.; Peticolas, L. M.; Bartolone, L. M.; Walker, A., NASA's Heliophysics Educator Ambassador Program, *American Geophysical Union, Fall Meeting 2011, abstract #ED34B-06*
79. Ali, N. A.; Peticolas, L. M.; Paglierani, R.; Mendez, B. J., Creating Heliophysics Concept Maps, *American Geophysical Union, Fall Meeting 2011, abstract #ED33A-0768*
78. Fillingim, M. O.; Brain, D. A.; Peticolas, L. M.; Yan, D.; Fricke, K. W., Visualizing Planetary Magnetic Fields (and Why You Should Care), *American Geophysical Union, Fall Meeting 2011, abstract #ED13A-0806*

2010

Refereed Publications

77. Fillingim, M. O.; Peticolas, L. M.; Lillis, R. J.; Brain, D. A.; Halekas, J. S.; Lummerzheim, D.; Bougher, S. W.; Lin, Robert P.; Bougher, Stephen W., Localized ionization patches in the nighttime ionosphere of Mars and their electrodynamic consequences, *Icarus, Volume 206, Issue 1, p. 112-119, DOI: 10.1016/j.icarus.2009.03.005, 2010.*

Other: White Paper Publications

76. Nancy Alima Ali, Laura Peticolas, Ruth Paglierani, Karen Meyer, Karin Hauck, Recommendations for Education/Public Outreach (E/PO) Programs: A White Paper Submitted for Consideration to the NRC Decadal Survey in Solar and Space Physics, http://www8.nationalacademies.org/SSBSurvey/DetailFileDisplay.aspx?id=756&parm_type=HDS, 2010

Other: Conference/Workshop Proceedings

75. Peticolas, Laura, Bryan Mendez, Darlene Yan, Lindsay Bartolone, Dianne Robinson, Barbara Maggi, Paul Adams, Allyson Walker, Patricia Reiff, Kerri Beisser and Dawn Turney, A Heliophysics Education and Public Outreach Effort: Training and Supporting the Trainers, *Science Education and Outreach: Forging a Path to the Future. Proceedings of a conference held September 12-16, 2009 in Millbrae, California, USA. Edited by Jonathan Barnes, Denise A. Smith, Michael G. Gibbs, and James G. Manning., p.420, 2010.*
74. Fillingim, M. O.; Brain, D. A.; Peticolas, L. M.; Schultz, G.; Yan, D.; Guevara, S.; Randol, S., Seeing the Invisible: Educating the Public on Planetary Magnetic Fields and How They Affect Atmospheres *Science Education and Outreach: Forging a Path to the Future. Proceedings of a conference held September 12-16, 2009 in Millbrae, California, USA. Edited by Jonathan Barnes, Denise A. Smith, Michael G. Gibbs, and James G. Manning., p.460, 2010.*

Other: Presentations and Published Abstracts

73. Peticolas, L. M.; Maryboy, N.; Begay, D.; Paglierani, R., Lessons Learned from Cosmic Serpent, a professional development project for informal educators on science and native ways of knowing, *American Geophysical Union, Fall Meeting 2010, abstract #ED33B-10*
72. Fillingim, M. O.; Brain, D. A.; Peticolas, L. M.; Yan, D.; Fricke, K., Goldilocks and the Three Planets, *American Geophysical Union, Fall Meeting 2010, abstract #ED23A-0713*

2009

Refereed Publications

71. Lillis, Robert J.; Fillingim, Matthew O.; Peticolas, Laura M.; Brain, David A.; Lin, Robert P.; Bougher, Stephen W., Nightside ionosphere of Mars: Modeling the effects of crustal magnetic fields and electron pitch angle distributions on electron impact ionization, *Journal of Geophysical Research, Volume 114, Issue E11, DOI:10.1029/2009JE003379, 2009.*

Other: Presentations and Published Abstracts

70. L. M. Peticolas, Involving Scientists in Education and Public Outreach, *American Geophysical Union, Fall Meeting 2009, abstract #ED31B-0536*
69. Fillingim, M. O.; Brain, D. A.; Peticolas, L. M.; Schultz, G.; Yan, D.; Guevara, S.; Randol, S., Seeing the Invisible: Educating the Public on Planetary Magnetic Fields and How They Affect Atmospheres, *American Geophysical Union, Fall Meeting 2009, abstract #ED54A-03*
68. Mendez, B. J.; Smith, D.; Shipp, S. S.; Schwerin, T. G.; Stockman, S. A.; Cooper, L. P.; Peticolas, L. M., Science Education and Public Outreach Forums (SEPOF): Providing Coordination and Support for NASA's Science Mission Directorate Education and Outreach Programs, *American Geophysical Union, Fall Meeting 2009, abstract #ED31A-0527*

67. Mendez, B.J., D. Smith, S. S. Shipp, T. G. Schwerin, S. A. Stockman, L. P. Cooper, and L. M. Peticolas, Science Education and Public Outreach Forums (SEPOF): Providing Coordination and Support for NASA's Science Mission Directorate Education and Outreach Programs, *American Geophysical Union, Fall Meeting 2009, abstract # ED31A-0527*.
66. Fillingim, M.O., D. A. Brain, L. M. Peticolas, G. Schultz, D. Yan, S. Guevara, and S. Randol, Seeing the Invisible: Educating the Public on Planetary Magnetic Fields and How they Affect Atmospheres, *American Geophysical Union, Fall Meeting 2009, abstract # ED54A-03*.

2008

Refereed Publications (** = education publications)

65. **Peticolas, L. M., N. Craig, S. F. Odenwald, A. Walker, C. T. Russell, V. Angelopoulos, C. Willard, M. B. Larson, W. A. Hiscock, J. M. Stoke, M. B. Moldwin, The Time History of Events and Macroscale Interactions during Substorms (THEMIS) Education and Outreach (E/PO) Program, *Space Sci. Rev., ISN 0038-6308 (Print) 1572-9672 (Online), doi: 10.1007/s11214-008-9458-5*, 2008.
64. Mende, S., S. Harris, H. Frey, V. Angelopoulos, E. Donovan, B. Jackel, M. Greffen, C. Russell, and L. Peticolas, The THEMIS array of ground based observatories for the study of substorms, *Space Sci. Rev., doi:10.1007/s11214-008-9380-x*, 2008.

Other: Conference/Workshop Proceedings

63. Peticolas, L. M., B. Mendez, I. Hawkins, C. Whitworth, Effective Strategies for Engaging Latino/Hispanic Audiences in Astronomy during the International Year of Astronomy, *Astronomical Society of the Pacific's Conference Series, Vol. 400*, Edited by Michael G. Gibbs, Jonathan Barnes, James G. Manning, and Bruce Partridge. San Francisco: Astronomical Society of the Pacific, p.422, 2008.
62. Peticolas, L., S. Odenwald, and A. Walker, Aurora and Magnetospheric Teacher Guides: Bringing Data into the Classroom, Proceedings of the "EPO and a Changing World: Creating Linkages and Expanding Partnerships," *Astronomical Society of the Pacific's Conference Series Volume 389, eds. C. Garmany, M. G. Gibbs, and J. Ward Moody, p.65*, 2008.
61. Quinn, M., L. Peticolas, J. MacCallum, and J. Luhmann, Learning About the Dynamic Sun Through Sounds, Proceedings of the "EPO and a Changing World: Creating Linkages and Expanding Partnerships," *Astronomical Society of the Pacific's Conference Series Volume 389, eds. C. Garmany, M. G. Gibbs, and J. Ward Moody, p.63*, 2008.

Other: Presentations and Published Abstracts

60. Peticolas, L. M., Walker, A., Schultz, G., Oieroset, M., Frey, H., Phan, T., Teacher Professional Development Site and Community College Course: Lessons learned from an institutional NASA ROSES E/PO supplement, *American Geophysical Union, Fall Meeting 2008, abstract #ED51A-0561*.
59. Prakash, M.; L. Peticolas, Exploring Earth's Magnetism and Northern lights in High School Classroom, presented at the *American Geophysical Union, Spring Meeting 2008, abstract #ED31B-04*.
58. Fillingim, M. O., L. M. Peticolas, R. J. Lillis, D. A. Brain, J. S. Halekas, D. Lummerzheim, and S. W. Bougher, Horizontal Gradients in the Nighttime Ionosphere of Mars and Their Electromagnetic Consequences, presented at the AGU Chapman Conference on the Solar Wind Interaction with Mars, San Diego, CA, January 22 - 25, 2008.

2007

Refereed Publications (** = education publications)

57. **Peticolas, L.M., N. Craig, T. Kucera, D. J. Michels, J. Gerulskis, R. J. MacDowall, K. Beisser, C. Chrisotimos, J. G. Luhmann, A. B. Galvin, L. Ratta, E. Drobnes, B. J. Méndez, S. Hill, K. Marren, and R. Howard, The STEREO Education and Public Outreach Program, *Space Sci. Rev.*, ISN 0038-6308 (Print) 1572-9672 (Online), doi: 10.1007/s11214-007-9287-y, 2007
56. Fillingim, M. O., L. M. Peticolas, R. J. Lillis, D. A. Brain, J. S. Halekas, D. L. Mitchell, R. P. Lin, D. Lummerzheim, S. W. Bougher, and D. L. Kirchner, Model calculations of electron precipitation induced ionization patches on the nightside of Mars, *Geophys. Res. Lett.*, 34, doi:10.1029/2007GL029986, 2007.

Other: Presentations and Published Abstracts

55. Peticolas, L. M., M. Quinn, J. MacCallum, and J. Luhmann (2007), Learning about the dynamic Sun through sounds, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract ED31A-0086.
54. Peticolas, L. M., M.B. Moldwin, S. Odenwald, V. Trautman, C. DeWolf, J. Bean, L. Orr, A. Walker, C.T. Russell, and V. Angelopoulos (2007), THEMIS Education and Public Outreach: Multi-point investigations of Earth's magnetic field changes from ground-based magnetometers by teachers and students, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract SM13D-07.
53. Peticolas, L. M., N. Craig, I. Hawkins, and C. Walker, Teaching and sharing about the Sun in the United States and with Spanish language resources, *Eos Trans. AGU*, Spring Meet. Suppl., Abstract, 2007
52. Peticolas, L., S. Odenwald, and A. Walker, Aurora and Magnetospheric Teacher Guides: Bringing Data into the Classroom, *ASP Conference*, Abstract TH21, 2007
51. Orr, L.A., L. Peticolas, and D. Korber (2007), Student Involvement in the THEMIS Research and Real-Time Data Collection, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract ED23B-1284.
50. DeWolf, C. L., L. Peticolas, M. Moldwin, and V. Trautman (2007), Using THEMIS and ACE Data for Authentic Student Research Projects in the Secondary Classroom, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract ED21A-0081.
49. Quinn, M., L. Peticolas, J. MacCallum, and J. Luhmann, Learning About the Dynamic Sun Through Sounds, *ASP Conference*, Abstract TH04, 2007
48. Craig, N., L. M. Peticolas, V. Angelopoulos, and B. Thompson, Auroras and Space Weather Celebrating the International Heliophysics Year in Classroom, *Eos Trans. AGU*, Spring Meet. Suppl., Abstract, 2007
47. Fillingim, M. O., L. M. Peticolas, R. J. Lillis, D. A. Brain, J. S. Halekas, D. Lummerzheim, and S. W. Bougher, Localized Ionization Patches on the Nightside of Mars and Their Dependence Upon Atmospheric Variations, *Eos Trans. AGU*, Spring Meet. Suppl., Abstract, 2007

2006

Refereed Publications

46. Williams, J. D., E. MacDonald, M. McCarthy, L. Peticolas, and G. K. Parks, Parallel electric fields inferred during a pulsating aurora, *Ann. Geophys.*, 24, 1829, 2006.
45. Donovan, Eric, Stephen Mende, Brian Jackel, Harald Frey, Mikko Syrjsuo, Igor Voronkov, Trond Trondsen, Laura Peticolas, Vassilis Angelopoulos, Stewart Harris, Mike Greffen, and Martin

- Connors, The THEMIS all-sky imaging array-system design and initial results from the prototype imager, *J. Atmos. Space. Phys.*, 2006
44. Brain, D. A., J. S. Halekas, L. M Peticolas, R. P. Lin, J. G. Luhmann, D. L. Mitchell, G. T. Delory, S. W. Bougher, M. H. Acuna, and H. Reme, On the origin of aurorae on Mars, *Geophys. Res. Lett.*, 2006.

Other: Presentations and Published Abstracts

43. Peticolas, L. M., N. Craig, J. Luhmann, P. Schroeder, S. Bale, and R. J. MacDowall, STEREO Space Weather Sonification, *Eos Trans. AGU*, Fall Meet. Suppl., Abstract, 2006.
42. Craig, N., Peticolas, L., and Trautman, V., Determining Earth's magnetic field strength during magnetically quiet and stormy times and predict the location of dancing Auroras using THEMIS Mission Educators ground based magnetometer data, *Eos Trans. AGU, Fall Meet. Suppl., Abstract*, 2006.
41. Brain, D., J. Halekas, L. Peticolas, M. Fillingim, R. Lin, J. Luhmann, D. Mitchell, S. Bougher, and D. Lummerzheim, Origin, Variability, and Consequences of the Martian Aurora, *Eos Trans. AGU, Fall Meet. Suppl., Abstract*, 2006

2005

Refereed Publications

40. Chaston, C. C., L. M Peticolas, C. W. Carlson, J. P. McFadden, F. Mozer, M. Wilber, G. K. Parkes, A. Hull, R. E. Ergun, R. J. Strangeway, M. Anddree, Y. Khotyaintsev, M. L. Goldstein, M. Acuna, E. J. Lund, H. Reme, I. Dandouras, A.N. Fazakerley, and A. Balogh, Energy deposition by Alfvén waves into the dayside auroral oval: Cluster and FAST observations, *J. Geophys. Res.*, 110, A02211, doi:10.1029/2004JA010483, 2005.

Other: Invited Talks

39. Peticolas, L. M., R. Morales Manzanares, D. Bithell, N. Craig, J. G. Luhmann, S. Bale, Space Weather Sonification for scientists, educators, and musicians, *Eos Trans. AGU*, 86(18), Jt. Assem. Suppl., Abstract SH14A-02 INVITED, 2005.
38. Peticolas, L. M. R. Morales Manzanares, D. Bithell, N. Craig, I. Sircar, NASA's STEREO-IMPACT brings you space weather through sound, *AAPT Winter Meeting, Abstract BC03*, 2005.

Other: Presentations and Published Abstracts

37. Peticolas, L.M., N. Craig, S. Odenwald, A. Walker, Magnetic data in the classroom using a sustainable Education and Outreach program, *Eos Trans. AGU*, 86(52), *Fall Meet. Suppl., Abstract ED22A-06*, 2005.
36. Peticolas, L. M. N. Craig, Highlights of the Education and Public Outreach Programs of NASA Aurora Missions, *THEMIS and FAST, ASP 117th Meeting, Building Community: the emerging EPO profession, PR15*, 2005.
35. Méndez, B.J., L.M. Peticolas, N. Craig, STEREO-IMPACT E/PO: Getting Ready for Launch!, *Eos Trans. AGU*, 86(52), *Fall Meet. Suppl., Abstract ED31D-1234*, 2005.
34. Brain, D.A., J.S. Halekas, M.O. Fillingim, R.J. Lillis, L.M. Peticolas, R.P. Lin, J.G. Luhmann, D.L. Mitchell, G.T. Delory, M.H. Acuna, Observation of Auroral-like Peaked Electron Distributions at Mars, *Eos Trans. AGU*, 86(52), *Fall Meet. Suppl., Abstract SA53B-1166*, 2005.

33. Fillingim, M.O., L.M. Peticolas, R.J. Lillis, D.A. Brain, J.S. Halekas, R.P. Lin, D. Lummerzheim, S.W. Bougher, Calculating Martian Auroral Emission including Strong Field Gradients and Accelerated Electron Spectra, *Eos Trans. AGU*, 86(52), *Fall Meet. Suppl., Abstract SA51B-1142*, 2005.
32. Craig, N., L.M. Peticolas, B.J. Méndez, R. Morales Manzanares, Education & Public Outreach (E/PO) programs for NASA's Sun-Earth Connection Missions – RHESSI and STEREO, ASP 117th Meeting, Building Community: the emerging EPO profession, PR15, 2005.
31. Galand, M., Chakrabarti, S., Peticolas, L. M., and Carlson, C. W., Particle albedo in proton aurora, *Eos Trans. AGU, Spring Meet. Suppl., Abstract*, 2005.

2004

Other: Presentations and Published Abstracts

30. Peticolas, L.M., N. Craig, and B. Mendez, Partners and Networks in the THEMIS Education and Public Outreach Program, *Eos Trans. AGU*, 85(47), *Fall Meet. Suppl., Abstract ED21B-0067*, 2004.
29. Peticolas, L. M., R. M. Manzanares, N. Craig, J. G. Luhmann, E. Campion, B. Mendez, Informal education: space weather music using sonification of solar wind data, *AAS 204th Meeting, Abstract 78.01*, 2004.
28. Lummerzheim, D., L. Peticolas, A. Otto, J. Styers, B. Lanchester, B. Bristow, and M. Conde, Ionospheric Heating in Aurora: Observations, *Eos Trans. AGU*, 85(47), *Fall Meet. Suppl., Abstract SA13B-06*, 2004.
27. Mende, S., H. Frey, C. Carlson, L. Peticolas, Multiplatform Investigation of the Role of Wave Accelerated Electrons in Magnetospheric Processes, *Eos Trans. AGU*, 85(47), *Fall Meet. Suppl., Abstract SM22B-04*, 2004.
26. Craig, N., L. M. Peticolas, V. Angelopoulos, Education and Public Outreach with THEMIS Ground-based research grade magnetometers, *AAS 204th Meeting, Abstract 77.06*, 2004.

2003

Refereed Publications

25. Immel T. J., S. B. Mende, H. U. Frey, L. M. Peticolas, E. Sagawa, Determination of low latitude plasma drift speeds from FUV images, *Geophys. Res. Lett.*, 30 (18), 1945, doi:10.1029/2003GL017573, 2003.
24. Mende, S. B., C. W. Carlson, H. U. Frey, L. M. Peticolas, N. Ostgaard, FAST and IMAGE-FUV observations of a substorm onset, *J. Geophys. Res.*, 108 (A9), 1344, doi:10.1029/2002JA009787, 2003.
23. Phan, T., H. Frey, S. Frey, L. Peticolas, S. Fuselier, C. Carlson, H. Reme, J. -M. Bosqued, A. Balogh, M. Dunlop, I. Dandouras, J. -A. Sauvaud, S. Mende, J. McFadden, G. Parks, L. Kistler, E. Moebius, B. Klecker, G. Paschmann, M. Fujimoto, S. Petrinec, M. F. Marcucci, A. Korth, R. Lundin, Simultaneous Cluster and IMAGE observations of cusp reconnection and auroral proton spot for Northward IMF, *Geophys. Res. Lett.*, 30 (10), 1509, doi:10.1029/2003GL016885, 2003.
22. Lanchester, B. S., M. Galand, S. C. Robertson, M. H. Rees, D. Lummerzheim, I. Furniss, L. M. Peticolas, H. U. Frey, M. Mendillo, J. Baumgardner, High resolution measurements and modeling of auroral hydrogen emission line profiles, *Ann. Geophys.*, pg. 1629-1643, 2003
21. Chaston, C.C., L.M. Peticolas, J.W. Bonnell, C.W. Carlson, R.E. Ergun, J.P. McFadden, The width and brightness of auroral arcs driven by inertial Alfvén waves, *J. Geophys. Res.*, 108(A2), 1091, doi:10.1029/2001JA007537, 2003.

Other: Invited Talks

20. Peticolas, L. M. and H. Stenbaek-Nielsen, Optical auroral imaging conjugate to the FAST satellite, *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract SM21C-02, 2003.

Other: Presentations and Published Abstracts

19. Peticolas, L.M., B. Mendez, G. Schultz, J. G. Luhmann, and N. Craig, Using backward design in NASA educational resources, *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract ED51C-1207, 2003.
18. Peticolas, L., N. Craig, and V. Angelopolous, THEMIS education and public outreach activities, *AAS, Late abstract*, 2003.
17. Mendez, B. M., Peticolas, L.M., G. Schultz, and N. Craig, High leverage NASA education and public outreach teacher professional development programs, *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract ED41D-1192, 2003
16. Craig, N., B. J. Mendez, L. Peticolas, Education and public outreach programs for RHESSI and STEREO/IMPACT missions, *AAS, Abstract 10.18*, 2003.

2002

Refereed Publications

15. Chaston, C. C., J. W. Bonnell, C. W. Carlson, M. Berthomier, L. M. Peticolas, I. Roth, J. P. McFadden, R. E. Ergun, R. J. Strangeway, Electron acceleration in the ionospheric Alfvén resonator, *J. Geophys. Res.*, 107(A11), 1413, doi:10.1029/2002JA009272, 2002.
14. Peticolas, L.M., T.J. Hallinan, H.C. Stenbaek-Nielsen, J.W. Bonnell, C.W. Carlson, A study of black aurora from aircraft-based optical observations and plasma measurements on FAST, *J. Geophys. Res.*, 107(A8), doi:10.1029/2001JA900157, 2002.
13. Chaston, C. C., J. W. Bonnell, L. M. Peticolas, C. W. Carlson, R. E. Ergun, J. P. McFadden, Driven Alfvén Waves and Electron Acceleration: A FAST Case Study, *Geophys. Res. Lett.*, 29(11), 1535, doi:10.1029/2001GL013842, 2002.
12. Immel, T.J., S.B. Mende, H.U. Frey, L.M. Peticolas, C.W. Carlson, J.C Gerard, B. Hubert, S.A. Fuselier, J.L. Burch, Precipitation of auroral protons in detached arcs, *Geophys. Res. Lett.*, 29(11), 1519, doi:10.1029/2001GL013847, 2002.

Other: Invited Talks

11. Peticolas, L. M., Time-dependent transport of electrons in the aurora, *University of Oregon Physics Colloquium*, Dec. 5, 2002.
10. Peticolas, L. M., Physics of auroral forms, *University of Oregon Undergraduate Seminar*, Dec. 4, 2002.

Other: Presentations and Published Abstracts

9. Peticolas, L.M., J.W. Bonnell, C.C. Chaston, C.W. Carlson, J.P. McFadden, H.C. Stenbaek-Nielsen, T. J. Hallinan, Waves and the current-voltage relationship in multiple auroral arcs, *Eos Trans. AGU, Fall Meet. Suppl.*, Abstract SM12A-0491, 2002.

2001

Other: Presentations and Published Abstracts

8. Peticolas, L.M., J.W. Bonnell, C.C. Chaston, C.W. Carlson and J.P. McFadden, Accelerated, cold electron spectra in the pre-midnight central plasma sheet region of the auroral oval at 4000 km, *Eos Trans. AGU*, 80(48), Fall Meet. Suppl., F1082, Abstract SM51B-0807, 2001.
7. Peticolas, L.M., A study of black aurora from aircraft-based optical observations and plasma measurements on FAST, *University of California Space Physics Seminar, October, 2001*.
6. Peticolas, L.M., T.J. Hallinan, H.C. Stenbaek-Nielsen, J.W. Bonnell and C.W. Carlson, A study of black aurora from aircraft-based optical observations and plasma measurements on FAST, IGPP Conference on the nightside magnetosphere, *Yellowstone, 2001*.

2000

Refereed Publications

5. Peticolas, L. M., Time-dependent electron transport and optical emissions in the aurora, Ph.D. thesis, Univ. of Alaska, Fairbanks, 2000.
4. Peticolas, L. and D. Lummerzheim, Time-dependent transport of field-aligned bursts of electrons in flickering aurora, *J. Geophys. Res.*, 105, 12895, 2000.

Other: Presentations and Published Abstracts

3. Peticolas, L.M., H.C. Stenbaek-Nielsen, T.J. Hallinan, W. Peria, C.C. Chaston and C.W. Carlson, An overview of aircraft-based optical observations of the aurora conjugate to the FAST satellite, *Eos Trans. AGU*, 80(47), Fall Meet. Suppl., 2000.

1999

Refereed Publications (** = education publications)

2. ** Stenbaek-Nielsen, H.C., T.J. Hallinan and L. Peticolas, Why do auroras look the way they do?, *Earth in Space*, 12, 5, 1999
1. Stenbaek-Nielsen, H.C., T.J. Hallinan and L. Peticolas, Why do auroras look the way they do?, *Eos Trans. AGU*, 80, 198, 1999