

Publications and Presentations Associated with NIRCcam's Education Programs with the GSUSA
NIRCcam-specific (2002-2015) and in partnership with SETI (2015-2022)

Publications:

Subject Matter Experts in Science Education: The Legacy of NIRCcam and JWST, McCarthy, D., Lebofsky, L., and Nordt, A., Astronomical Society of the Pacific, 2022, *AstroBeat*, 183, 9 pages.

http://www.astronomycamp.org/articles/FINAL_Astrobeat%20February%202022.pdf

Science for Girls: Reaching the Remote Audience, Harman, P. and team members, 2021, Astronomical Society of the Pacific Conference Series, 2021, "ASP2020: Embracing the Future: Astronomy Teaching and Public Engagement," 531, 367.

https://aspbooks.org/a/volumes/article_details/?paper_id=40464

"Advancing Astronomy for All." Proceedings of a conference held in the California Wine Country, Sonoma Valley, California, Astronomical Society of the Pacific Conference Series, 2018, 524, Edited by G. Schultz, J. Barnes, and L. Shore.

- *Engage with Girl Scout and their Space Science Badges*, Harman, P., Chin, W., Grissom, C., DeVore, E., Fahy, J., Henricks, J., Kersh, E., Summer, T., White, V., McCarthy, D., Lebofsky, L., and Mayo, L., p. 265.
- *Building Girl Scout Space Science Badges, Bridges and Teams*, Harman, P., Chin, W., Grissom, C., Friedman, W., Fahy, J., Henricks, J., Kersh, E., Summer, T., White, V., McCarthy, D., Lebofsky, L., and Mayo, L., p. 171.
<https://ui.adsabs.harvard.edu/abs/2019ASPC..524..171H/abstract>
- *Building Community Around Girl Scout Space Science Badges*, Fahy, J., Henricks, J., Harman, P., White, V., Summer, T., Berg, J., Chin, W., Grissom, C., Friedman, W., McCarthy, D., Lebofsky, L., Mayo, L., and Kersh, E., p. 59.
<https://ui.adsabs.harvard.edu/abs/2019ASPC..524...59F/abstract>
- *Girl Friendly Amateur Astronomy Outreach Skill Development*, Summer, T., White, V., Henricks, J., Harman, P., Fahy, J., Kersh, E., p. 323.

"Ensuring STEM Literacy: A National Conference on STEM Education and Public Outreach." Proceedings of a Conference held at San Jose State University on 20-24 July, 2013. Edited by James G. Manning, Joseph B. Jensen, Mary Kay Hemenway, and Michael G. Gibbs. Astronomical Society of the Pacific Conference Series, 2014, 483.

- *Inspiration is 'Mission Critical': A Panel Discussion*, McCarthy, D. and Lebofsky, L., p. 449.
- *NASA's Role in Addressing Misconceptions: Scale of Our Solar System and Other Planetary Systems*, Lebofsky, L., McCarthy, D., Higgins, M., and Lebofsky, N., p. 187.
- *Mission and Research Scientists in NASA EPO and STEM Education: The Results of 15 Years of EPO*, Lebofsky, L., McCarthy, D., Higgins, M., Mueller, B., and Lebofsky, N., p. 375.

A Human-Powered Orrery: Connecting Learners with the Night Sky, Lebofsky, L., Lebofsky, N., Higgins, M., McCarthy, D., and the NIRCcam, E/PO Team, 2013, *The Universe in the Classroom* (Astronomical Society of the Pacific), #82, Winter 2013, p. 1.

https://astrosociety.org/file_download/inline/5c10093e-111f-47a4-b634-c93ae212f0b9

"Communicating Science: A National Conference on Science Education and Public Outreach." Proceedings of a Conference held at Tucson, Arizona, USA 4-8 August 2013. Edited by J. Barnes, C. Shupla, J.G. Manning and M.G. Gibbs. San Francisco: Astronomical Society of the Pacific Conference Series, 2013, 473:

- *Bringing Astronomy Activities and Science Content to Girls Locally and Nationally: A Girl Scout and NIRCcam Collaboration*, Higgins, M., Lebofsky, L., McCarthy, D., and Lebofsky, N., p. 355.

- *Practical Lessons From the First Decade of EPO Partnership Between NIRCam/JWST and the GSUSA*, McCarthy, D., Lebofsky, L., Schlingman, W., and Higgins, M., p. 289.
- *Using Models to Address Misconceptions in Size and Scale Related to the Earth, Moon, Solar System, and Universe*, Lebofsky, L., Canizo, T., Lebofsky, N., McCarthy, D., Higgins, M., and Salthouse, K., p. 285.

“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. San Francisco: Astronomical Society of the Pacific, Astronomical Society of the Pacific Conference Series, 2011, [443](#).

- *The James Webb Space Telescope's Near-Infrared Camera (NIRCam): Making Models, Building Understanding*, McCarthy, D., Lebofsky, L., Higgins, M., and Lebofsky, N., p. 280.
- *A Portable/Traveling Human Orrery*, Lebofsky, L., Higgins, M., McCarthy, D., and Lebofsky, N., p. 63.

Editorials:

JWST Does Deliver on Planet A, D. McCarthy and L. Lebofsky, Arizona Daily Star, January 12, 2022, online, Letter to the Editor

JWST Also Delivers on Earth, D. McCarthy and L. Lebofsky, Arizona Daily Star, January 7, 2022, online, Letter to the Editor

https://tucson.com/opinion/letters/local-issues/letter-jwst-also-delivers-on-earth/article_3e59b212-6f28-11ec-85be-e3ff1f910105.html

Presentations at Conferences:

Astronomical Society of the Pacific

See above under articles.

“Building Community: The Emerging EPO Profession,” 117th Annual Meeting, 2005.

- *Linking Girls to the Sky: NIRCam/JWST's National Outreach to the Girl Scouts*, McCarthy, D.
- *Astronomy Patch Day: An Interactive Astronomy Experience for Girl Scouts*, Knierman, K., McCarthy, D., Schutz, K.

ASP Conference Series #124 (2012):

- *Building and Sustaining Partnerships to Communicate Science to Girls*. Sharma, M., Walker, C, and Lebofsky, L., 42.
- *A Portable/Traveling Human Orrery, Part 1: Modeling the Solar System—Everything in Motion*. Higgins, M., Lebofsky, L., McCarthy, D., Cobb, W., Weeks, S., Ristvey, J., and Buxner, S., 48.
- *A Portable/Traveling Human Orrery, Part 2: Assessing Prior Knowledge and Misconceptions about the Solar System*, Lebofsky, L., Higgins, M., McCarthy, D., Cobb, W., Weeks, S., Ristvey, J., and Buxner, S., 50.

American Astronomical Society

Virtual Planetary and Space Science for Girls, Harman, P., Chin, W., Friedman, W., White, V., Summer, T., Fahy, J., Henricks, J., Mayo, L., McCarthy, D., and Lebofsky, L., 2021, AAS 237th meeting, Bull AAS., [53](#), #412.01.

Reaching for the Stars: Bringing Space Science to Young Women, Harman, P., Chin, W., Friedman, W., McCarthy, D., Lebofsky, L., White, V., Summer, T., Fahy, J., Henricks, J., and Mayo, L., 2020, AAS 235th meeting, #337.09.

Girl Scout Space Science Badges for Daisies, Brownies, and Juniors, Harman, P., Chin, W., Grisson, C., Friedman, W., McCarthy, D., Lebofsky, L., Mayo, L., Fahy, J., Kersh, E., Henricks, J., White, V., and Summer, T., 2019, AAS 233rd meeting, #147.10.

Girl Scout Badges: Engaging Girls in Planetary Science, Harman, P., Chin, W., Grisson, C., Friedman, W.,

McCarthy, D., Lebofsky, L., Mayo, L., Fahy, J., Kersh, E., Henricks, J., White, V., and Summer, T., 2018, DPS meeting #50, #202.03.

Girl Scouts and Subject Matter Experts: What's the Connection? Harman P. and team, members, 2018, AAS 231st meeting, #131.06.

<http://adsabs.harvard.edu/abs/2018AAS...23113106H>

Girl Scout Badges: Engaging Girls in Planetary Science, Harman P., Chin W, Grissom C, Friedman W, McCarthy D, Lebofsky L, Mayo L, Fahy J, Henricks J, White V, and Summer T., 2018, DPS 50th meeting, #202.03.

https://legacy.aas.org/files/final_abstract_program_0.pdf

Reaching for the Stars: NASA Science for Girl Scouts (Girl Scout Stars), DeVore, E., and science team members, 2017, 227th AAS Winter Meeting, #439.04.

<https://ui.adsabs.harvard.edu/abs/2017AAS...22943907D/abstract>

Inaugural Girl Scout Destination Astronomy Camp, Lebofsky, L.A., McCarthy, D.W., Wright, J., Wright, R., Mace, M., Floyd, C., 2017, DPS 49th meeting, #116.06.

<https://ui.adsabs.harvard.edu/abs/2017DPS...4911606L/abstract>

Leadership Workshops for Adult Girl Scout Leaders, Lebofsky, L., McCarthy, D., DeVore, E., Harman, P., and the Reaching Stars Team, 2016, DPS 48th meeting, #417.03.

Using Exoplanet Models to Explore NGSS and the Nature of Science and as a Tool for Understanding the Scientific Results from NIRCcam/JWST, Lebofsky, L., McCarthy, D., Higgins, M., and Lebofsky, N., 2014, DPS meeting 46th meeting, #212.17.

Scientists and Educators Working Together: Everyone Teaches, Everyone Learns, Lebofsky, L., Lebofsky, N., McCarthy, D., Canizo, T., Schmitt, W., and Higgins, M., 2013, Bull. AAS 45, 44.

Using Models to Address Misconceptions in Size and Scale Related to the Earth, Moon, Solar System, and Universe, Lebofsky, L., Lebofsky, N., McCarthy, D., Higgins, M., Salthouse, K., and Canizo, T., 2012, AAS DPS 44th meeting, #411.06.

Bringing Astronomy Activities and Science Content to Girls Locally and Nationally: A Girl Scout and NIRCcam Collaboration, Lebofsky, L., Higgins, M., McCarthy, D., and Lebofsky, N., 2012, AAS 219th meeting, #350.06.

Nurturing The STEM Pipeline: Graduate Student Leadership In NIRCcam's Ongoing E/PO Mission For JWST, Schlingman, W., Stock, N., Teske, J., Tyler, K., Biller, B., Donley, J., Hedden, A., Knierman, K. and Young, P., 2011, AAS 217th meeting, Bull AAS, 43, #431.01.

James Webb Space Telescope's Near Infrared Camera (NIRCcam): Making Models, Building Understanding, Lebofsky, L., McCarthy, D., Higgins, M., and Lebofsky, N., 2010, DPS meeting #42, #37.01, Bull. AAS, 42, 967.

Astronomy Patch Day: An Interactive Astronomy Experience for Girl Scouts, Knierman, K., McCarthy, D., Schutz, K., 2005, AAS 207th meeting, #67.02, Bull AAS, 37, 1263.

NIRCcam/NGST Education and Public Outreach: "Linking Girls with the Sky," D. McCarthy, L. Lebofsky, T. Slater, M. Rieke, and S. Pompea, 2002, DPS meeting #31.06, Bull. A.A.S., 34, 896.

American Geophysical Union

Reaching for the Stars: NASA Planetary and Space Science for Girl Scouts, Harman, P., Friedman, W., Fahy, J., Chin, W., Henricks, J., Summer, T., White, V., McCarthy, D., Lebofsky, L., Mayo, L., and Herr, E., 2021, AGU Fall meetings, abstract ED15C-0539.

Planetary and Space Science for Girls: Reaching the Remote Audience, Harman, P., Friedman, W., Fahy, J., Henricks, J., White, V., Summer, T., McCarthy, D., Lebofsky, L., and Mayo, L., 2020, AGU Fall meeting, abstract ED041-06.

Reaching for the Stars: Bringing Space Science to Young Women. Harman P., Chin W., Grissom C., Friedman W., McCarthy D., Lebofsky L., Mayo L., Fahy J., Henricks J., White V., and Summer T., 2019, AGU Fall Meeting, abstract ED44A-05.

Girl Scout Space Science Badges and Beyond: Collaborative Learning for Girls and NASA Sci Act Collaborations, Harman, P., Chin, W., Grissom, C., Friedman, W., McCarthy, D., Lebofsky, L., Mayo, L., Fahy, J., Henricks, J., Kersh, E., White, V., and Summer, T., 2018, AGU Fall Meeting, abstract ED41E-1242.
<https://ui.adsabs.harvard.edu/abs/2018AGUFMED41E1242H/abstract>

Girl Scout Stars: Engaging Girl Scouts in the 2017 Total Eclipse, Harman, P. and team members, 2017 AGU December Meeting, abstract ED34B-04.
<https://agu.confex.com/agu/fm17/meetingapp.cgi/Paper/221597>

Girl Scout Camps and Badges: Engaging Girls in NASA Science, Harman, P. and team members, 2017, AGU December Meeting, abstract ED54A-01.
<https://agu.confex.com/agu/fm17/meetingapp.cgi/Paper/221607>

Reaching for the Stars: NASA Science for Girl Scouts (Girl Scout Stars), DeVore, E., Harman, P., Berg, J., Friedman, W., Fahy, J., Henricks, J., Chin, W., Hudson, A., Grissom, C., Lebofsky, L., McCarthy, D., Gurton, S., White, V., Summer, T., Mayo, L., Patel, R., and Bass, K., 2016, AGU Fall Meeting, abstract ED43B-0855
<https://ui.adsabs.harvard.edu/abs/2016AGUFMED43B0855D/abstract>

Miscellaneous

Girl Scouts and Subject Matter Experts: Making Connections, Harman, P., Chin, W., Grissom, C., Friedman, W., McCarthy, D., Lebofsky, L., Mayo, L., Fahy, J., Henricks, J., White, V., and Summer, T., 2020, 51st Lunar and Planetary Science Conference, #2408.
<https://www.hou.usra.edu/meetings/lpsc2020/pdf/2408.pdf>

Reaching for the Stars: Engaging Girl Scouts, Volunteers and Families in NASA Science. Harman P., Chin W., Grissom C., Friedman W., McCarthy D., Lebofsky L., Mayo L., Fahy J., Henricks J., White V., Summer T., Bass-Rockman K., Patel-Rockman R. Poster: NASA Sci Act Annual Meeting 2019.

OSIRIS-REx, JWST, and Girl Scouts Partner with Libraries for Women's History Month and Beyond. Spitz, A., Lebofsky, L., Higgins, M. L., Dubois, R., Dykhuis, M., Braun, A., and Walter, J., 2014, 45th Lunar and Planetary Science Conference, #2475.
<https://www.hou.usra.edu/meetings/lpsc2014/pdf/2475.pdf>

*Bringing Astronomy Activities and Science Content to Girls Locally and Nationally: A Girl Scout NIRC*am* Collaboration*, Lebofsky, L., Higgins, M., McCarthy, D., and Lebofsky, N., 2012, 43rd Lunar and Planetary Science Conf, March 19-23, #1303.
<https://www.lpi.usra.edu/meetings/lpsc2012/pdf/1303.pdf>

*Near Infrared Camera (NIRC*am*): Making Models, Building Understanding*, Lebofsky, L., McCarthy, D., Higgins, M., and Lebofsky, N., 2010, 41st Lunar and Planetary Science Conference, March 1-5, #1533.
<https://www.lpi.usra.edu/meetings/lpsc2010/pdf/1856.pdf>

*NIRC*am*/JWST Education and Public Outreach: "Linking Girls to the Sky"*, K. Knierman, P. Young, D. McCarthy, L. Lebofsky, Conference on "Women in Astronomy II: Ten Years After," (Caltech; June 27-28, 2003), poster.