

**ENGAGING THE PUBLIC WITH PLANETARY SCIENCE AT COMIC BOOK CONVENTIONS.** S. L. Tiedeken<sup>1,2</sup>, D. Myers<sup>1,3</sup>, J. Fooshee<sup>4</sup>, M. Wasser<sup>1,2</sup>, and A. Jones<sup>1</sup>. <sup>1</sup>NASA Goddard Space Flight Center, Greenbelt, MD 20771, staci.l.tiedeken@nasa.gov, <sup>2</sup>ADNET Systems, Inc., Bethesda, MD, <sup>3</sup>SAIC, Reston, VA, <sup>4</sup>Science Festival Alliance at MIT, Cambridge, MA.

**Introduction:** When one thinks of a typical science outreach event, the image of interactive activities on a table with a gathering of individuals in front typically pops into mind. The venue of the event varies, with science museums, convention centers, libraries, and schools being a few of the common locales. One area where public engagement with science is becoming increasingly popular is at comic book conventions, where the opportunity to reach diverse audiences is great.

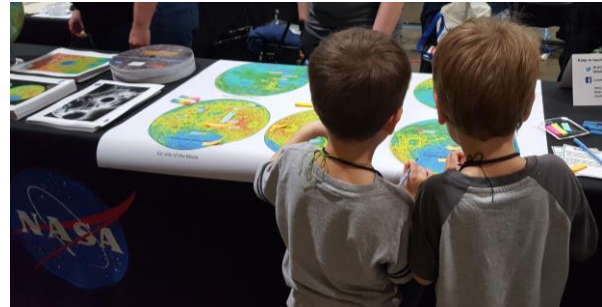
A comic book convention, or comic con, is an event that focuses on comic books and comic book culture. Fans gather to meet comic book creators, experts, and other comic book fans. Today's comic cons are expanding from the traditional comic book focus and are now incorporating science-related themes with science-focused panels and activities. As a result, an even greater diversity of individuals attend each comic con, thus providing the opportunity for public engagement professionals to reach new audiences in their dissemination of science-related topics.

**Awesome Con:** Awesome Con is Washington, D.C.'s Comic Con and is a celebration of geek culture, bringing roughly 70,000 fans together the last two years [1]. Celebrities from across comics, movies, television, toys, and games meet and greet fans at this family-friendly and inclusive event.

One area of Awesome Con, called Future Con, is dedicated to exploring where science, science fiction, and technology meet. NASA Goddard Space Flight Center (GSFC) has contributed to Future Con in a variety of ways; we have organized various space-related panels along with a dedicated NASA booth that includes an assortment of interactive activities.

**NASA panels.** At Awesome Con 2018, attendees were able to participate in four NASA-themed science panels. These panels included topics ranging from our home planet to the depths of our universe. Titles of Awesome Con 2018's NASA panels were as follows: "Cassini's 13 Year Journey," "NASA Science at Earth Extremes," "NASA Explores Jupiter and its Awesome Moons," and "Fermi Decades of Observing."

**NASA booth in Future Con.** Within the Future Con part of Awesome Con, NASA has a dedicated space for participants to learn about current research. At Awesome Con 2018, visitors had the opportunity to explore a variety of topics including the Lunar Reconnaissance



*Figure 1: Awesome Con 2018 participants choosing a lunar landing site at the NASA booth in Future Con.*

Orbiter (LRO) mission and lunar landing sites, terrestrial elevations from the ICESat-2 mission, and the Global Precipitation Measurement mission. They were also able to participate in a virtual reality experience courtesy of the Solar System Exploration Research Virtual Institute, learn about spectroscopy, and see an infrared camera in action courtesy of the Satellite Servicing Projects Division at NASA GSFC.

Having both a booth and panel sessions allowed NASA scientists and outreach specialists to engage in conversations with people of all ages. Awesome Con 2018 had an estimated total attendance of 67,000 people.

**GeekGirlCon:** GeekGirlCon is an inclusive convention that celebrates the geek in everyone and honors the legacy of women contributing to science and technology; comics, arts, and literature; game play and game design; and beyond [2]. Set in the heart of downtown Seattle, 2018's GeekGirlCon brought in over 4,000 attendees.

**Do-It-Yourself Science Zone.** A popular part of this particular comic con is the Do-It-Yourself Science Zone, where a team of scientists and science educators guide participants through a selection of fun experiments and answer questions about their specific scientific specialty. We led a lunar landing site activity in this portion of the convention; attendees were able to "claim" their very own landing site on the Moon using topographic data from the LRO mission. Participants also learned about satellite servicing and NASA's Restore-L project.



Figure 2: A family at GeekGirlCon 2018 learning about satellite servicing.

*NASA panel.* A variety of panels were also included in the programming of the comic con. We organized the “Careers at NASA: From Mission Operations to Public Engagement” panel which included six female NASA GSFC scientists, engineers, and public engagement specialists. Being on this panel allowed us to share our experiences and career advice with a diverse group of young girls.



Figure 3: NASA GSFC panelists at GeekGirlCon 2018.

**References:** [1] Awesome Con Committee (2018) *Awesome Con*, <http://awesome-con.com/faqs/#f3152606755c4be19>. [2] GeekGirlCon Committee (2018) *GeekGirlCon*, <https://geekgirlcon.com/geekgirlcon-basics/>.