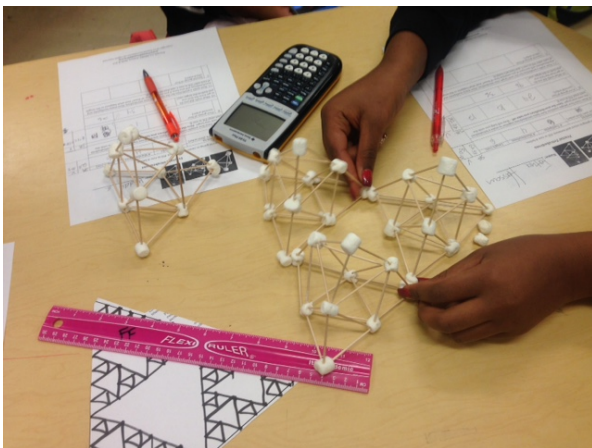


2017 Annual Report

Summary

- In 2017, the Fractal Foundation reached about 12,700 people in New Mexico and Minnesota, of which over 3,350 (26%) were children. We are proud to be getting our message out about how cool science and math are to people across a broad range of ages, from K-12 and university students to senior citizens.
- For the second year in a row, funding from Sandia National Laboratories helped us reach about 1,500 teachers and students from Title I Albuquerque Public Schools.
- We are happy share the latest news about generous donations from anonymous fractal enthusiasts who are supporting the Fractal Foundation's mission by funding the creation of digitally-printed fractal hot air balloons – coming in 2018!
- Our staff grew from three in 2016 to five in 2017 due to increased demand for our programs at before- and after-school programs.



The Impact of our Outreach

Outreach at Schools

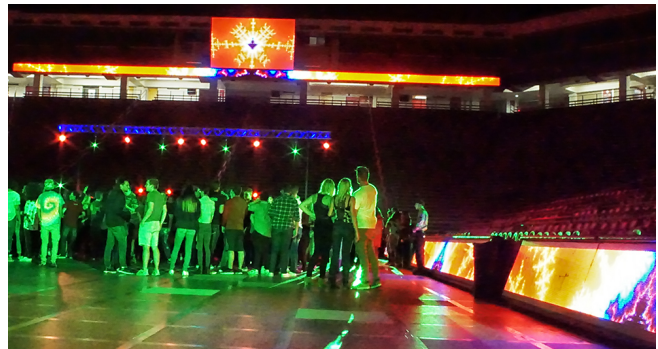
We reached the greatest number of children (about 1,000) through our outreach conducted at schools. We visited at least 15 different schools throughout the year, where we gave a presentation to a large group of students or led hands-on activities in classrooms. We are proud to report that for the fourth year in a row, we participated in Wilson Middle School's Science in the Community Day, an event that we cherish participating in.

Special Events

Our second greatest impact with children was at special events, where we spread our fractal message to about almost 800 students. Events included

- the Explora Science, Technology, Engineering and Math (STEM) Fiesta,
- the Earth Day math event at the NM Museum of Natural History and Science (Museum),
- Math on a Stick at the Minnesota State Fair,
- the Girl Scout Extravaganza,
- an Explora adult night,
- a fractal competition at Hamline University in Minnesota,
- STEM day at the Railyards Market,
- a summer camp sponsored by Sandia National Labs (HM Tech),
- the Lobo Life Party in the Pit,
- a science summer camp in Cuba, NM, and
- visits to senior centers.

We reached over 3,200 adults at these events; the single largest event was the Party in the Pit, where an estimated 2,700 University of New Mexico students were surrounded by fractal images on the screens in The Pit.



First Friday Fractal Shows

Our ever-popular First Friday Fractals show at the Museum drew over an estimated 5,300 adults and 750 children over the course of the year. Each month, the Fractal Foundation hosts a set of four shows in the museum's planetarium where members of the public watch mind-blowing fractal zooms while learning about fractals and the Fractal Foundation's outreach efforts.

Special Fractal Shows

Fractal shows for schools groups at the Museum's planetarium are gaining in popularity. Seven school groups either came to a private show at the Museum or bought group tickets to attend First Friday Fractals. In addition, Pajarito Environmental Education Center in Los Alamos hosted at least four fractal zoom shows in their planetarium in 2017. We reached about 560 children and 235 adults at all of these special fractal shows.

Before- and After-School Partnerships

We continued our three-year-long partnership with Children's Choice in running a 10-week-long after school program at a public elementary school in Albuquerque and hosted our first after school program at a Rio Rancho elementary public school in spring 2017. After administrators saw

the popularity of our outreach in Rio Rancho, we were asked to host more before- and after-school programs at Rio Rancho elementary schools and ran our 10-week program at four schools in the fall. What we enjoy about these programs is the long-term and in-depth instruction that children receive in contrast to the traditional one-time visit.

Teacher Training

The biggest impact we had with teachers in 2017 was presenting our fractal activities (fractivities) at the Minnesota art teachers' conference, the Minnesota math teachers' conference, the Albuquerque Association for Gifted and Talented Students conference, the New Mexico STEM Symposium, and two trainings for math teachers at Hamline University in Minnesota. Through these events, we trained 225 teachers on teaching about fractals, utilizing free curriculum for fractivities on our web site, and leading these fractivities.

Thank You, Funders!

Because the Fractal Foundation is primarily a fee-for-service non-profit organization, schools pay us to give presentations or lead fractivities with their students. Thus, schools with little to no funds for special programs cannot afford to host us. However, we were able to reach about 1,500 teachers and students from Title I Albuquerque Public Schools because of funding from Sandia National Laboratories. We are grateful for their support!

Fractal Hot Air Balloons

We are extremely excited and grateful to recognize generous donations from anonymous fractal enthusiasts who are supporting our mission of increasing interest in science, math and art using the beauty of fractals. These supporters are helping us create and digitally print fractal patterns on hot air balloons that will be used to increase the Fractal Foundation's visibility and impact while broadening the awareness of fractals. These fractal hot air balloons will serve as marketing for how cool science and math can be, showing how these subjects, which are often considered challenging and boring, can be fun, engaging and creative. Choosing from the infinite number of design possibilities will be a fun challenge!



Staff

The Fractal Foundation employed a total of five staff in 2017: the Fractal Foundation founder and Creative Director, Dr. Jonathan Wolfe; Executive Director and Minnesota Education Director, Jennifer Schuetz Hadley; the New Mexico Education Director, Emma Eckert; and two educators in New Mexico, Serena Wright and Seth Hoffman.

