



NISE
NATIONAL INFORMAL
STEM EDUCATION
NETWORK

**Planning successful BIG events
such as anniversaries, celebrations, and
festivals**

Session Agenda

- **Brief overview of NISE Network planning resources**
- **NISE Network partner presentations**
 - **Paul Freiling**, Saint Louis Science Center, Saint Louis, MO
 - **Deb Novak**, New Mexico Museum of Natural History, Albuquerque, NM
 - **Keith Ostfeld**, Children's Museum of Houston, Houston, TX
 - **Aaron Slonecker**, Anchorage Museum, Anchorage, AK
 - **Nick Whites**, WonderLab Museum of Science, Health and Technology, Bloomington, IN
 - **Kari Wouk**, North Carolina Museum of Natural Sciences, Raleigh, NC
- **Q & A**

**All resources available online after the meeting:
nisenet.org/2019-partner-meeting**





What kind of **BIG** Events?

- 2017 Total Solar Eclipse
- Earth Day, Astronomy Day, Yuri's Night
- National Chemistry Week, National Engineers Week, Women's History Month
- Star parties, Mission launches, Science festivals, etc.

The 50th Anniversary of the Apollo Program



Celebrate past, present, and future lunar exploration!





NISE Network Resources

- **Moon Landing 50th Anniversary**
 - nisenet.org/moon50
- **Event planning and promotional Guides by STEM topic (& much more!)**
 - nisenet.org/About_Professional_Development
- **STEM Throughout the Year!**
 - nisenet.org/seasons



SAINT LOUIS
SCIENCE CENTER

Connect with curiosity.

Planning BIG Events at the Saint Louis Science Center

Paul Freiling
Director, Emerging Technology | Education





**It all started with
NanoDays...**

**Then we
added
more
BIG
events...**



Astronomy Day



**Brain Awareness
Day**



Bright Ideas Expo



**Community
Science Showcase**



DNA Day



Earth Day



Engineers Week



**Engineering
Career Day**

And more BIG events...



Festival of Fossils



**The Great
Outdoors Expo**



HealthFest



**International
Science Museum
Day**



**Mega Machines
Expo**



Pi Day



Pixel Pop Festival



**Rock, Fossil,
Quake**

Save The Frogs Day

Last Saturday of April

And then we had too many events and created a problem

**SAVE
THE
FROGS!**

savethefrogs.com/day

Sci



FEST

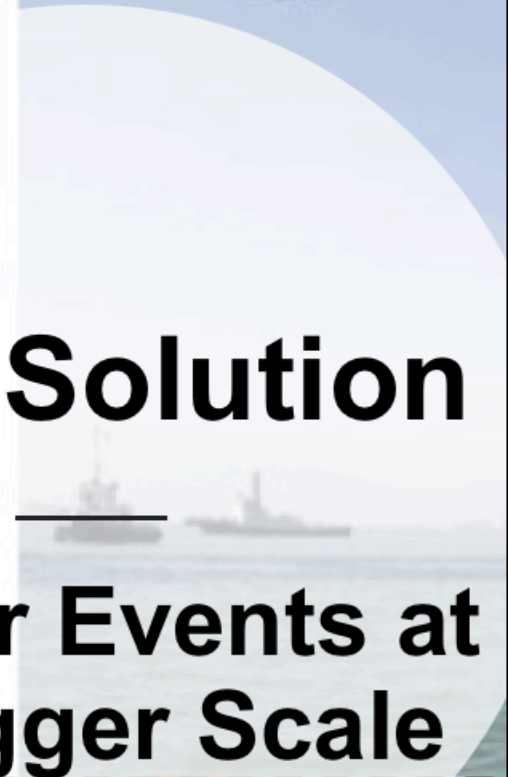
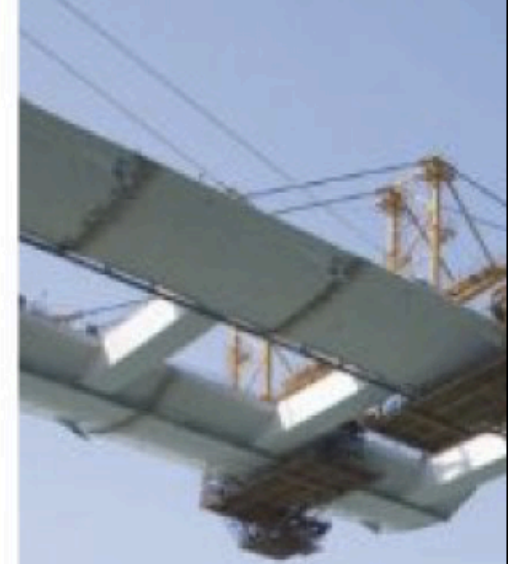


SciFest: Engineering Our World

February 24-25

Our Solution

**Fewer Events at
a Bigger Scale**



Outcomes



Increased Partner Collaboration



Increased Ability to React to Partner Requests



Increased visitors satisfaction
(Surprised to learn that our visitors wanted fewer events)



Not One Size Fits All



NISE Network Kits and SciFest

Conclusions



SciFest model positions us to better engage with NISE Net



NISE Network Kits are key for successful SciFest programming



New Mexico Museum of Natural History & Science

Deb Novak- Director of Education



Planetarium Programming

- Run by Jim Greenhouse
 - Assistant Geoff Skelton
 - ½ time Educator + rest of Edu pitches in
 - Workstudy students
 - & lots of volunteers
-
- 4 shows daily plus custom slots



In 2019, we're offering monthly night-sky observing opportunities to coincide with museum, local, or international events. Members of local astronomy groups will help you study the moon and stars through a variety of telescopes. Each event will feature any visible planets and other interesting objects in the sky.

The observing part of any event may be canceled when the sky is cloudy.

Dates	Observing	Event
January 3	12 - 3 p.m.	New Horizons at Ultima Thule
January 4	6 - 8 p.m.	First Friday - Lunar Eclipse Preview
January 20	8:30 - 11:30 p.m.	Supermoon Total Eclipse
February 1	6 - 8 p.m.	First Friday - Fall in Love with Science
March 1	7 - 9 p.m.	First Friday
April 5	8 - 9 p.m.	First Friday
April 10	8 - 9 p.m.	Stargazing at Valle de Oro NWR
May 3	8:30 - 9 p.m.	First Friday
June 7	8:30 - 9 p.m.	First Friday
June 30	10 a.m. - 2 p.m.	Asteroid Day
July 5	8:30 - 9 p.m.	First Friday
August 2	8:30 - 9 p.m.	First Friday
September 4	8 - 9 p.m.	Sandia Mountain Stargazing
September 6	8 - 9 p.m.	First Friday
October 4	7 - 9 p.m.	First Friday - Intl. Observe the Moon Night
November 1	7 - 9 p.m.	First Friday
November 11	12 - 4 p.m.	Transit of Mercury
December 6	6 - 8 p.m.	Old Town Holiday Stroll

SEPTEMBER 20 - 27, 2015

SPACE WEEK

AT THE NEW MEXICO MUSEUM OF
NATURAL HISTORY & SCIENCE

Explore our solar system, from the moon to the sun and out to planets recently visited by robotic explorers.

- **Sept. 20th** - See the **Sun** safely
- **Sept. 21st** - **Observe the Moon** and other objects in the night sky
- **Sept. 24th** - Learn about **meteorites**
- **Sept. 27th** - Witness the last **total lunar eclipse** until 2018
- Enjoy **special talks** and **planetarium shows** most afternoons

(Observing events are canceled when the sky is cloudy)

Visit the events section of the website for the complete schedule.



nmnaturalhistory.org
1801 Mountain Road



World Space Week

• October 4 - 10, 2016 •

An international celebration of space science and technology.

The **New Mexico Museum of Natural History & Science** will celebrate World Space Week with **three public talks**.

Space Week talks are **FREE (with Museum Admission)**
Check out the Museum Planetarium and Observatory too!

Wednesday, October 5 • 2 - 3pm

Citizen Science with NASA and the Globe Program
by Jeannie Allen, Science Educator, SSAI at Goddard Spaceflight Center

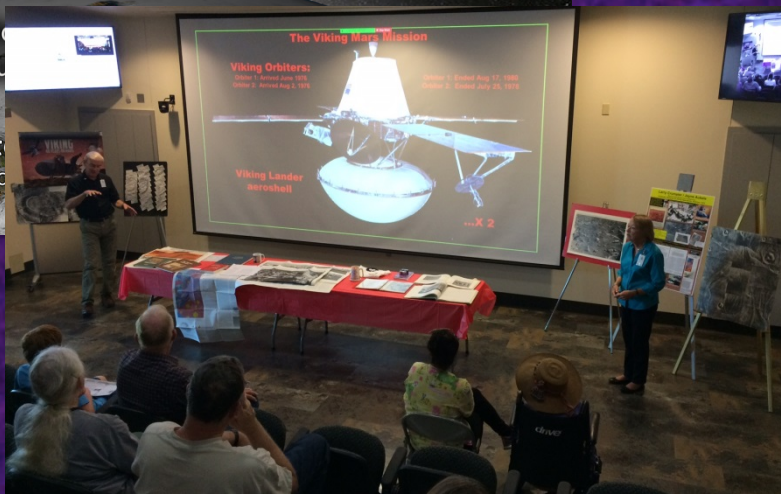
Thursday, October 6 • 2 - 3pm

40 Years on Mars: Celebrating the Viking Mission
by Larry Crumpler, Ph.D. and Jayne Aubele, NMMNHS

Friday, October 7 • 2 - 3pm

Advanced Infrared Imaging for Rapid Decision Support
by Wellesley Pereira, Ph.D. and Gabe Mounce, Air Force Research Laboratory

New Mexico Museum of Natural History and Science
1801 Mountain Rd NW, ABQ NM 87104
for information www.NMnaturalhistory.org
or call 841-2861





The Planetarium at the NMMNHS is an amazing theater that blends art, science, and fun! Our 55' Sky-Skan Definiti, full-dome theater features educational and entertaining multimedia presentations on astronomy and space science.



Other special events:

- Proposals
- Weddings
- Laser shows
- Full dome movies
- Fractal shows
- Unrelated lectures, films or meetings



Volunteers (we couldn't do it without them)



26
volunteers



2,376 hours
in 2018



#s don't
include teen
volunteers



Care and feeding of volunteers

- Good advance communication
- Asking nicely
- Rolling with ideas
- Reciprocal sharing
- Giving them credit
- Forming relationships with both individuals and the organizations
- Saying Thank You!!!



Engaging with multiple areas of STEM



Woohoo ! The end of Deb's slides and talk!



NEW MEXICO
MUSEUM OF
NATURAL HISTORY
& SCIENCE

Thank You!

MUSEUM

Binz 51
19040
Le Branch






Keith Ostfeld
Director of Educational Technology and
Exhibit Development
kto@cmhouston.org
[@kostfeld](https://twitter.com/kostfeld)

A Partial Eclipse of Our Hearts...





Mission: To transform communities through innovative, child-centered learning



We served 800,000 children, parents,
caregivers and educators in FY17

47% Hispanic/Latino
23% African-American
21% Anglo
8% Asian
1% other



27% Receive Free Admission

31% Receive Reduced Admission

Free community-based programs to 450,000 individuals

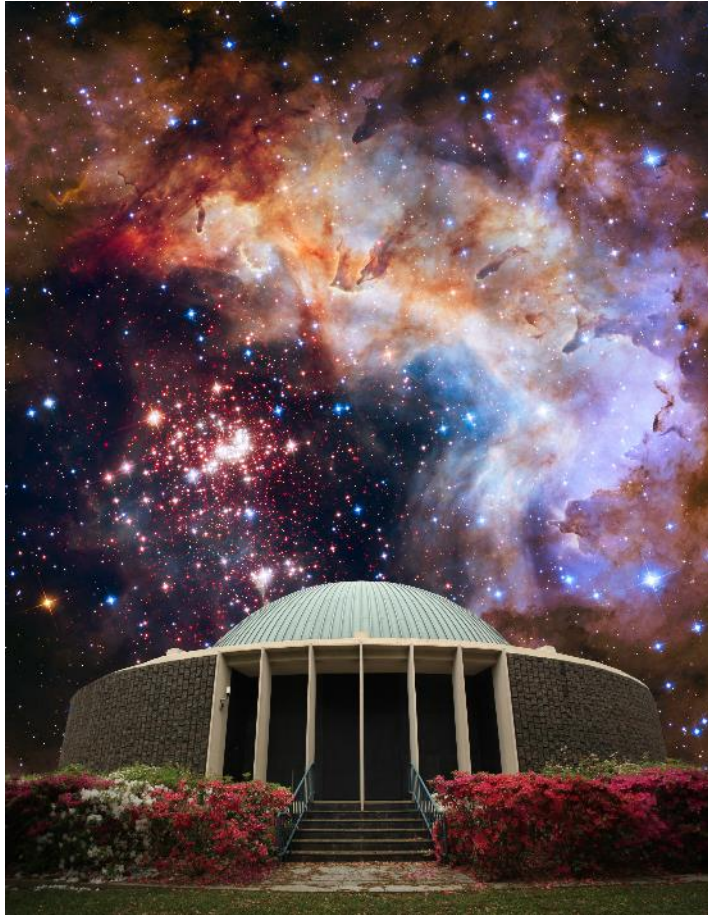
Total* Eclipse 2017

The Challenges

*Well, 66ish%



Is space big enough to share?



Space Center Houston

Houston Museum of Natural Science's
Burke Baker Planetarium

First Day of School



Personal Plans



Our event...



Event Process (my interpretation)

- Pick and name the theme
- Blue Sky planning
- Refining the message and activities
- Planning including safety considerations
- Execution

Theme and Name



Blue Sky Planning



Refining Messages and Activities



Planning




Safety




Safety



Execution



SOLAR ECLIPSE Activities



Solar Eclipse Viewing Party in Courtyard
11am - 3pm, weather permitting
Learn to use 2 types of pinhole viewers to safely observe the eclipse!


Exploratorium Live Stream in Brown Auditorium, 12pm
Watch a live stream of the 70-mile path of the "total eclipse" from Oregon to South Carolina

Exploring the Solar System: Big Sun, Small Moon at Science Station, all day
Learn why the moon and sun appear the same size

Exploring the Solar System: Solar Eclipse at Science Station, all day
Throw shade and explore what causes an eclipse

Exploring Earth: Bear's Shadow at Science Station, all day
Use a flashlight to experiment with shadows

Pinhole Postcard at Science Station, all day
Pick up a postcard to safely observe Solar Eclipse, while supplies last.



~ Event details and times are subject to change ~

Execution



Execution



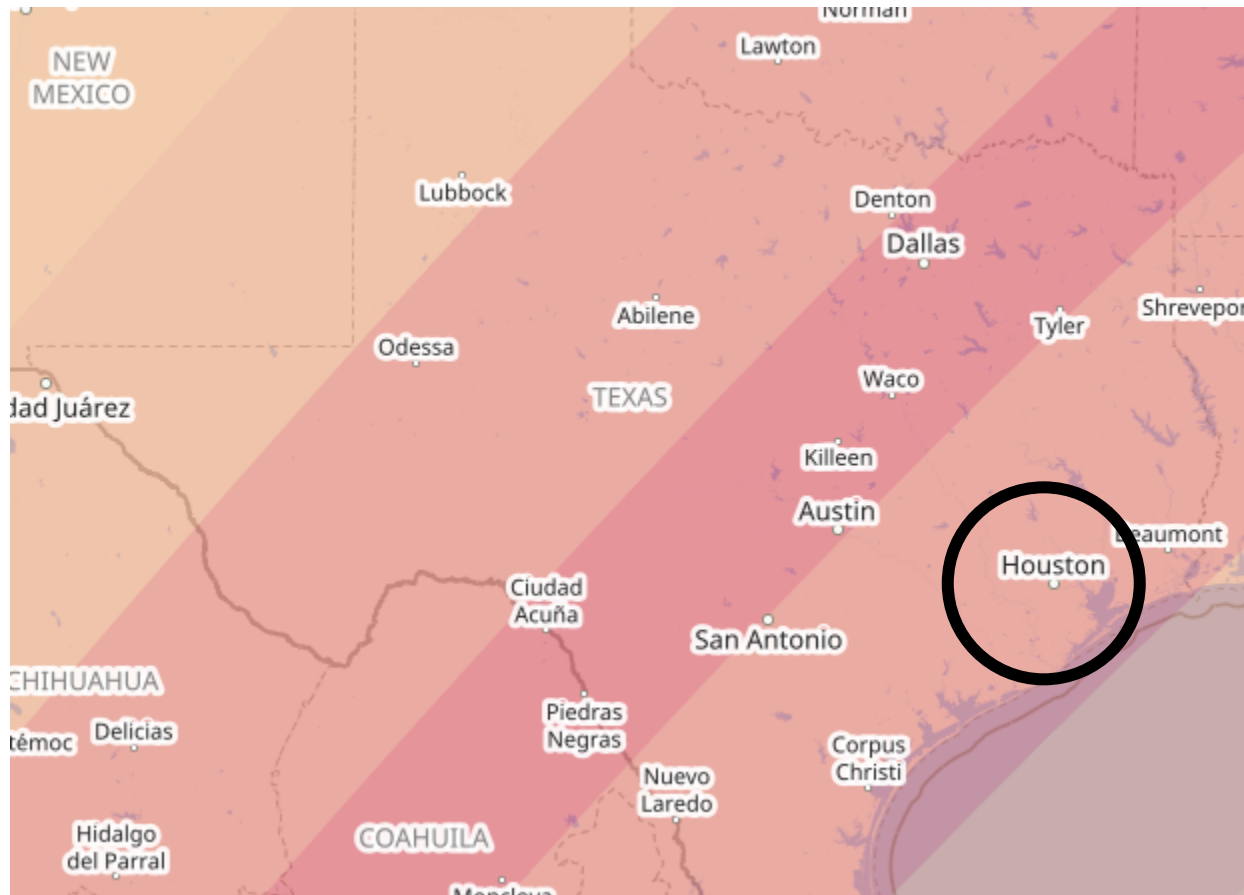
Execution



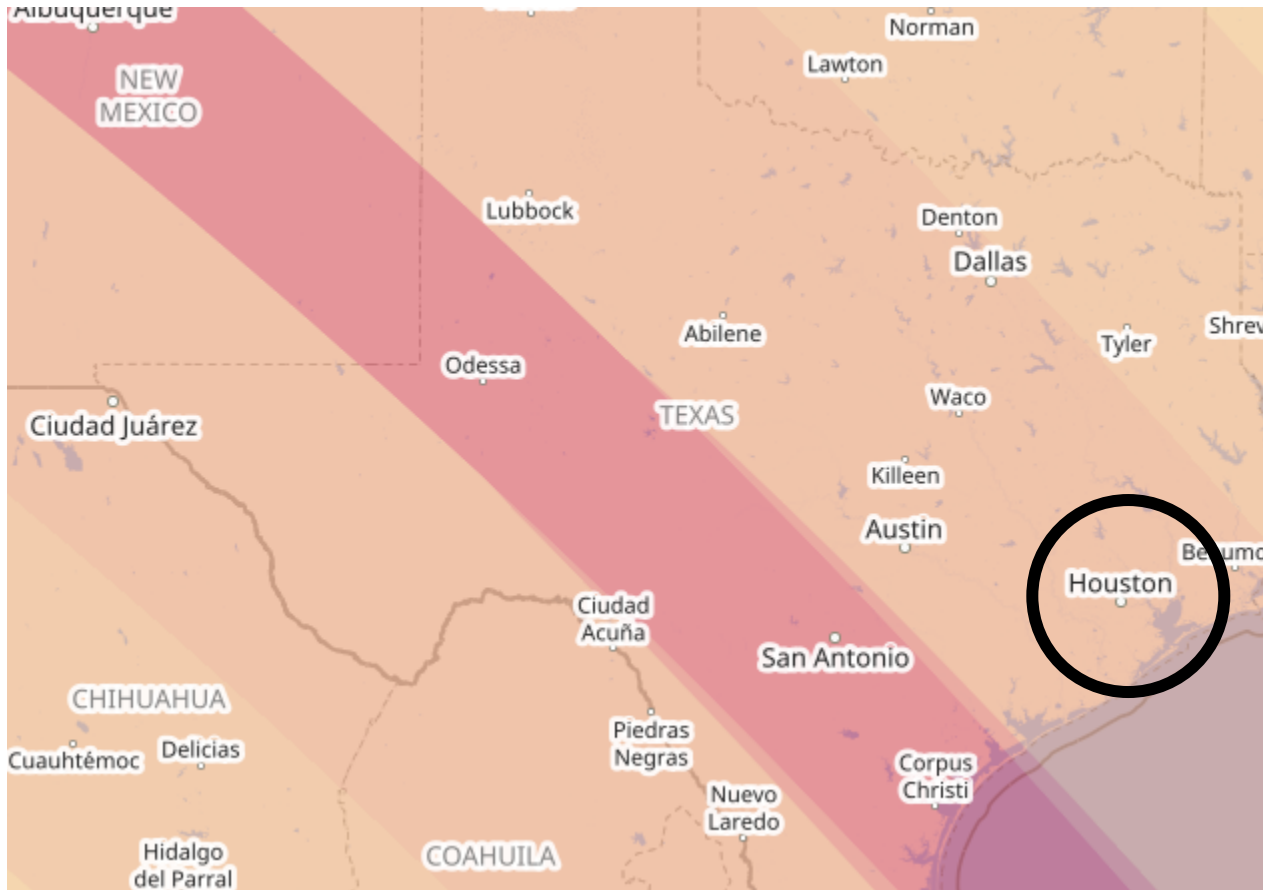
Execution



Total Eclipse 2024



Annular Eclipse 2023



Until then...



Until then...



Questions?



Keith Ostfeld
Director of Educational Technology and Exhibit Development
kto@cmhouston.org
@KeithOstfeld

Astronomy Days and Connecting NISE Toolkits to Planetarium and Outreach Programs

Aaron Slonecker
Planetarium & Science Education Manager



ANCHORAGE MUSEUM



ANCHORAGE MUSEUM

- MISSION: Connects people, expands perspectives, and encourages global dialogue about the North and its distinct environment.
- Multidiscipline approach
 - Smithsonian Arctic Studies Center
 - Alaska Exhibition
 - Art of the North
 - Discovery Center





DISCOVERY CENTER



ASTRONOMY DAY

ANCHORAGE MUSEUM ASTRONOMY DAYS

- Outdoor observing
- Hands-on activities (NISE kits)
- Partnerships
- Immersive experiences
- Lectures
- Workshops
- Citizen science projects
- Free swag



INTERNATIONAL ASTRONOMY DAY

SATURDAY, APR. 21

1 P.M. TO 4 P.M.

-Hands-on activities and solar observing for all ages.

-Meet Solar System Ambassadors as they share information on the newest space missions.

-Guest speaker Jenn Zahrt, PhD, presents a cultural astronomy and astrology lecture at 4 p.m.

 Planetarium &
Visualization Theater
UNIVERSITY of ALASKA ANCHORAGE



 ACS
Chemistry for Life®



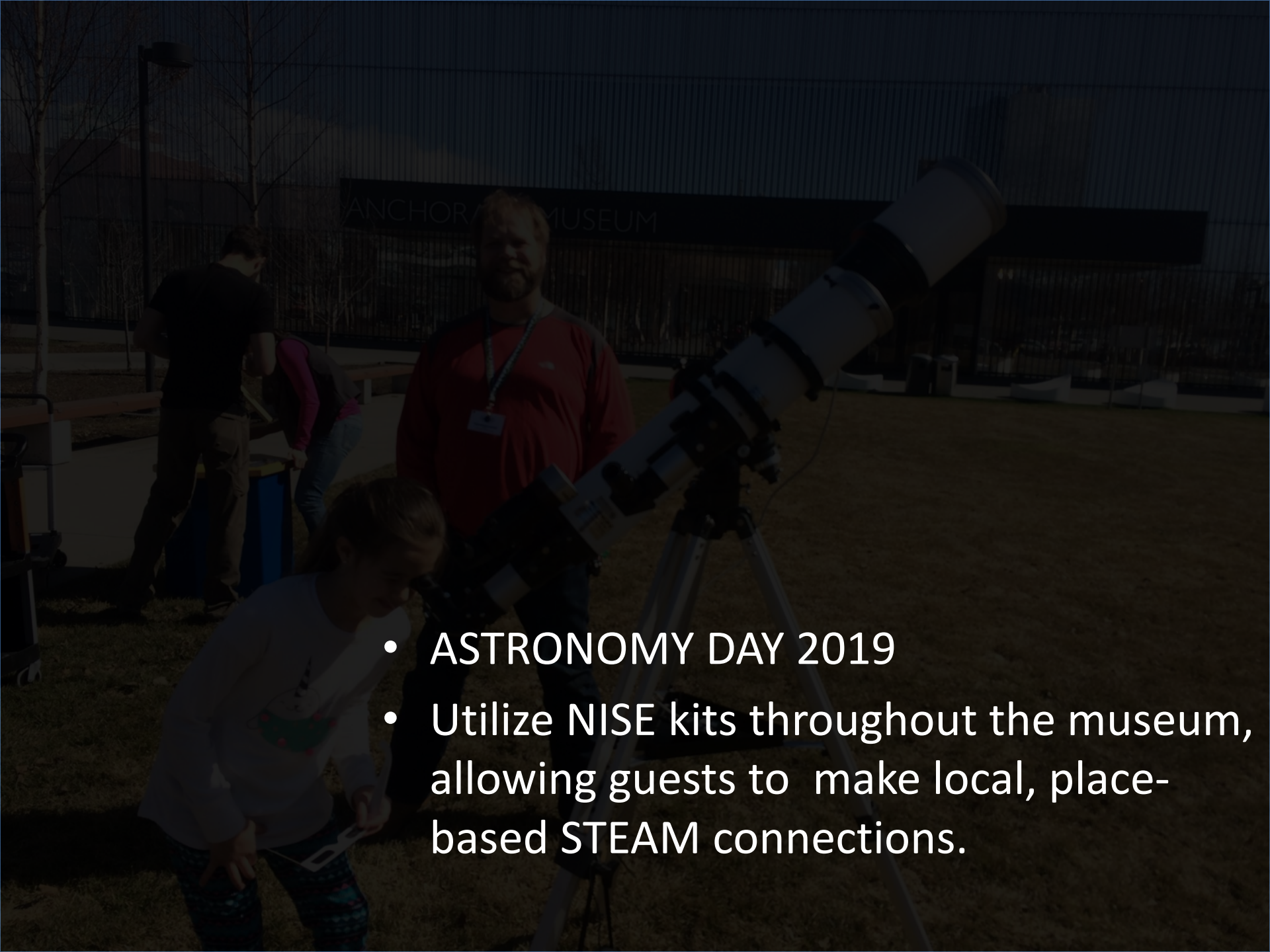
Renewable Energy
Alaska Project

2015 – 200 visitors

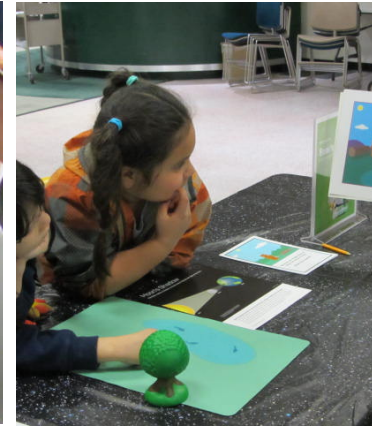
2016 – 200 visitors

2017 – 350 visitors (NISE kits)

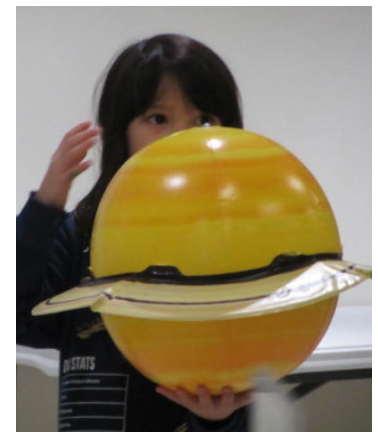
2018 – 5,000 visitors (NISE kits)*

- 
- A photograph of an astronomy event at the Anchorage Museum. A man in a red shirt stands next to a large telescope mounted on a tripod. A child is looking through the telescope. The background shows the museum building with the text "ANCHORAGE MUSEUM" visible. The image is dark, suggesting it was taken at night or in low light.
- ASTRONOMY DAY 2019
 - Utilize NISE kits throughout the museum, allowing guests to make local, place-based STEAM connections.

ADDITIONAL PROGRAMS



- Library outreach
- School group packages
- Summer camps and workshops





Nick Whites

Museum Educator

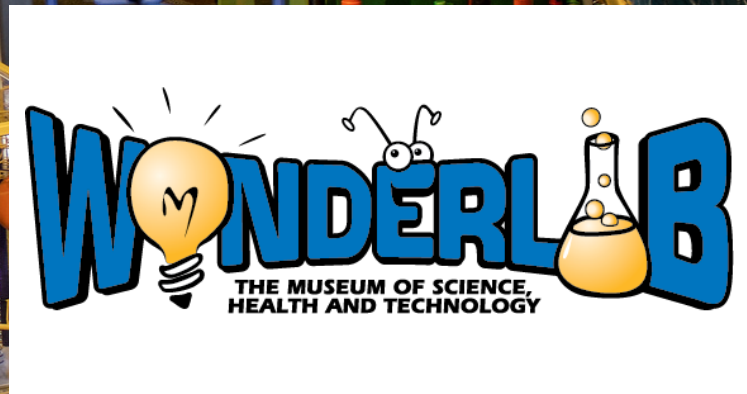
INSIGHT LAUNCH:
MISSION
TO MARS



Saturday, May 5th, 2018
11:00 am - 3:00 pm

wonderlab.org

The WonderLab is a small science museum in Bloomington, IN with around 80,000 visitors/year.



WonderLab presents a variety of **special events and programs** throughout the year.

Programs are designed
to be
**Interesting and
Relevant**
to visitors' lives



In 2018, WonderLab held its **Mission to Mars Program** to celebrate the NASA InSight Mission.



INSIGHT LAUNCH:
**MISSION
TO MARS**



Saturday, May 5th, 2018

11:00 am - 3:00 pm

FREE WITH ADMISSION

NASA's InSight Mission

is a geophysical lander sent to study the interior of Mars

The program combined museum resources with **NISE Net activities, Local Scientists, and Volunteers.**

A young boy with short blonde hair, wearing a black Under Armour jacket with yellow accents, is looking intently at a science activity being demonstrated by an adult. The background is blurred, showing other people in a museum or educational setting.

Outside Resources

contributed to the reach and impact of the program

NISE Network Resources were the foundation of the event.



Earth and Space Toolkit

included high quality activities to build off of for the event.

Local Scientists brought unique resources and expertise to the event.



IGWS

Indiana Geological
and Water Survey



Volunteers were essential to running activities and connecting with visitors.



Training

Helped volunteers understand activities and the connection to the InSight Mission.

Social Media was used to excite visitors about both the launch and the program.



WonderLab
Museum

@WonderLab.Museum

Home

About

Photos

Reviews

Events

Instagram feed

Pins

Videos

TripAdvisor Reviews

YouTube

Like Following Share ...

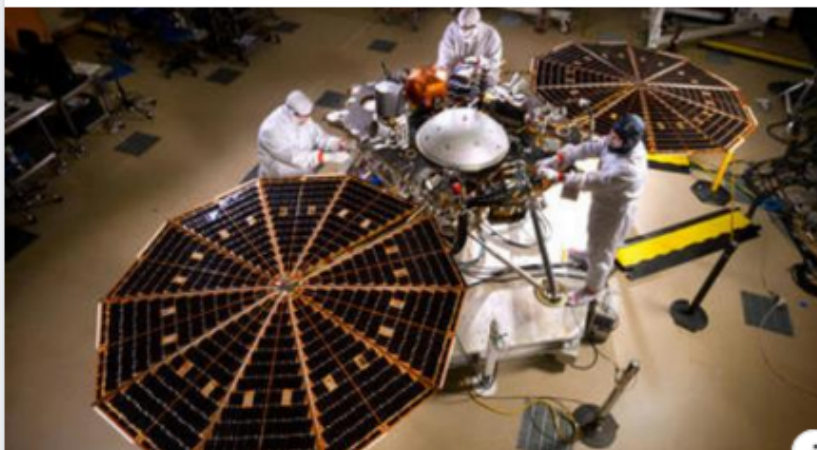


WonderLab Museum

26 November 2018 · 🌐

Congratulations to [NASA - National Aeronautics and Space Administration](#), [NASA Jet Propulsion Laboratory](#) and [Lockheed Martin](#). It's so exciting what can happen when scientists work together! [#marslanding](#)

"NASA's InSight has sent signals to Earth indicating that its solar panels are open and collecting sunlight on the Martian surface. NASA's Mars Odyssey orbiter relayed the signals, which were received on Earth at about 5:30 p.m. PST (8:30 p.m. EST)."



MARS.NASA.GOV

NASA's InSight Mars Lander

The InSight lander will study the interior of Mars and listen for Marsquakes.

Engagement

before and after the event helped expand program impact.

The program also helped visitors connect with **additional resources** and **future events**.



Our goal is to set the **Groundwork** for continued learning and engagement.



Nick Whites

Museum Educator

INSIGHT LAUNCH:
**MISSION
TO MARS**



Saturday, May 5th, 2018
11:00 am - 3:00 pm

wonderlab.org

THANK YOU

Acknowledgements

InSight Launch: Mission to Mars program was made possible by a materials award from the National Informal Science Education Network. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Informal Science Education Network(NISE Net).

InSight Launch: Mission to Mars program was presented in partnership with the Indiana Geological and Water Survey. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the Indiana Geological and Water Survey.

Image credits

Slides 2, 5, 6 Andrea Golden for the WonderLab

Slides 3, 8,10 Aleisha Kropf for the WonderLab

Slides: 7 Indiana Geological and Water Survey

Slides 1, 4, 11 WonderLab Marketing- graphic design team



ASTRONOMY DAYS

Kari Wouk, Senior Manager of Educational Collaborations
NC Museum of Natural Sciences



Astronomy Days

Ideas

2020 Things to Order

0/6 MD

Also worth noting that next year (summer 2020), a new Mars Rover will be launching! Based on Curiosity, but it will also "hunt for signs of past life and ... carry some fancy new gadgets, including a technology demonstration that will generate oxygen from the Martian atmosphere and a mini-helicopter that will fly scouting sorties." !!!!! So the Mars 2020 Rover is very exciting (it will be officially named by schoolkids in a 2019 naming contest). Wondering if we could get an expert to address it or an awesome scale model or some other in-depth way to cover it, perhaps adjacent to the Rover Maker Space? People would be super interested. The info snapshot: https://en.wikipedia.org/wiki/Mars_2020

+ Add another card

To-Do

Get Plaza Permit

Feb 1 MD

Sign out Museum on mCal

1 Feb 8 MD

Graphics request for poster

Feb 12 3

Graphics request for nametags

Feb 13 2

Reserve vehicles

Feb 14 3

Graphics request for t-shirts

Feb 15 2

Submit Astronaut Request Letter

Sep 26 6 2

General info on website

Sep 26 8

Decide Theme for Event

Sep 27 2 HS MD

Set Up Meeting with RAC

Oct 9 2

+ Add another card

Doing

+ Add a card

Done

+ Add a card

+ Add another list

Questions?

**All resources available online after the meeting:
nisenet.org/2019-partner-meeting**



THANK YOU!



This material is based upon work supported by NASA under cooperative agreement award numbers NNX16AC67A and 80NSSC18M0061.

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Aeronautics and Space Administration (NASA).

Regional Hub Contacts:

Northeast: CT, DC, DE, MA, MD, ME, NH, NY, NJ, OH, PA, RI, VT, WV

- Ali Jackson
- Sciencenter, Ithaca, NY
- ajackson@sciencenter.org

Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, SD, WI

- Christina Leavell
- Science Museum of Minnesota, Saint Paul, MN
- cleavell@smm.org

Southeast: AL, AR, FL, GA, KY, LA, MS, NC, OK, PR, SC, TN, TX, VA, USVI

- Brad Herring
- Museum of Life and Science, Durham, NC
- brad.herring@lifeandscience.org

West: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY, Guam & American Samoa

- Frank Kusiak
- Lawrence Hall of Science, Berkeley, CA
- frank_kusiak@berkeley.edu

Get Involved with the NISE Network!

Learn more and access online digital library:
nisenet.org

Monthly newsletter
nisenet.org/newsletter



Social networking:
nisenet.org/social

