

# NASA Outreach Program

## Contact Information

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## NASA/JPL Solar System Ambassador

Public outreach is a key element of NASA's mission and the volunteer Solar System Ambassadors lead the way. Solar System Ambassadors are experienced educators with a passion for space exploration. Ambassadors must reapply annually and go through extensive background checks before being accepted into the program.

Once accepted, Ambassadors get training in the form of conferences and discussions with the scientists and engineers involved in JPL missions. NASA and JPL also provide the posters, handouts and other materials used in the presentations.

Ambassadors then take this training and go to schools, churches, libraries and other venues to expose the wonder and excitement of the space and its exploration to the Nation.

All of these programs are provided free of charge, as part of NASA's ongoing mission.

## Aldrich Astronomical Society

Established in 1932, the Aldrich Astronomical Society is one of the leading Astronomy groups in Central Massachusetts. Club activities include observing, education and outreach, mirror grinding and telescope making, guest speakers and more. The club meets on the second and fourth Saturdays of each month at Anna Maria College, in Paxton.

The club is proud to have three Solar System Ambassadors to support its outreach and education activities. Additionally, two of our ambassadors are certified to request and handle moon samples from the Apollo missions. These samples come to Central Massachusetts once or twice a year. Contact us for additional information on this special program.

## Program Options

The programs listed on the back side of this sheet should be considered examples. Space exploration is dynamic programs are constantly changing to keep up. Programs are also customized to meet the needs of the audience and the event. Multiple programs can be merged together and we are happy to participate as part of larger community events.

Please contact us at least a month in advance to ensure that there is adequate time to prepare and to notify Aldrich volunteers who need to bring telescopes or other materials.



## Links

*Aldrich Astronomical Society*  
[www.aldrichastro.org](http://www.aldrichastro.org)

*Solar System Ambassadors*  
[www.jpl.nasa.gov/ambassador/](http://www.jpl.nasa.gov/ambassador/)

*NASA Web Site*  
[www.nasa.gov](http://www.nasa.gov)

*The Space Place (for Kids)*  
[spaceplace.jpl.nasa.gov](http://spaceplace.jpl.nasa.gov)

*Space News*  
[www.space.com](http://www.space.com)

*Dark Sky Institute*  
[www.savethemilkyway.org](http://www.savethemilkyway.org)

*Night Sky Magazine*  
[www.nightskymag.com](http://www.nightskymag.com)



## **“I Love to Fly”**

**Age Range:** *PreK to 1<sup>st</sup> Grade*

**Length:** 30 minutes

A reading of Becky Cross's excellent children's book on the Space Shuttle followed by a wide open Q&A on Space.

## **Small Bodies: An Elementary Introduction**

**Age Range:** *1<sup>st</sup> -- 5<sup>th</sup> Grades*

**Length:** 30 – 60 minutes

Comets and Asteroids may hold the key to understanding the formation of our Solar System, and NASA has several mission actively exploring these small bodies. Last July Deep Impact slammed into a comet and Stardust will return samples of comet dust to Earth. In 2006, Dawn will launch to explore two different asteroids. In this program volunteers from the audience will help build a comet common kitchen ingredients while learning about small bodies and these three important missions.

## **Mars or Bust**

**Age Range:** *1<sup>st</sup> grade to adult*

**Length:** 30 – 50 minutes

Mars has always captured our imagination. From Lowells imagined canals we have progressed to an extensive robotic exploration program with exciting scientific discoveries. This program, which can be tailored for all ages, introduces Mars with a comparison to our home planet and ends with the latest photography from the Mars rovers. Includes video of NASA engineers and the surprising landing sequence for the Rovers.

## **The Real Lord of the Rings**

**Age Range:** *5<sup>th</sup> grade to adult*

**Length:** 30 – 50 minutes

In Greek and Roman mythology Saturn was the king of the Titans; who ruled the Universe before the gods. Saturn the planet sits in just as lofty a position in our Solar System; with its beautiful ring system, 34+ moons, including Titan the only moon with an atmosphere. This program introduces the audience to Saturn and its moons with stunning pictures from the ongoing Cassini mission.

## **The Quest for Life**

**Age Range:** *5<sup>th</sup> grade to adult*

**Length:** 1 Hour

“Are we alone in the Universe?” This is one of the fundamental questions for humanity today. This highly participatory program takes the audience on a tour of Astronomy from galaxies, to star types, to planetary geology as we attempt to determine our own answer to this difficult

question.

## **Scouting the Solar System**

**Age Range:** 1<sup>th</sup> – 5<sup>th</sup> grades

**Length:** 2 hours

This program was specifically designed to meet the Cub Scout Astronomy belt loop and 3 Space Elective requirements. After learning some basic astronomy terms with a slide show and matching game, the scouts work together to build a map of the Solar System while learning about the planets and various missions to explore them.

## **Marvelous Moon Rocks**

**Age Range:** 3<sup>rd</sup> – 8<sup>th</sup> grades

**Length:** 1 ½ Hours

Using simulated (play dough) moon rocks, the students will conduct an experiment and analyze results with a computer graph to identify the types of rocks found on the moon during the Apollo missions. This leads to a discussion on the moons origins and the history of the Solar System.

## **Black Holes Don't Suck**

**Age Range:** *6<sup>th</sup> Grade and Up*

**Length:** 1 Hour

Learn how gravity bends space and defies the imagination. How can we study a thing that can stop time and break down physics? If it's black, how can we even see it?

## **Constellations**

**Age Range:** *All Ages*

**Length:** 30-50 minutes

Slide show on the constellations and object that you can see in the night sky. This program is tailored by season and usually precedes a sky watch (see below).

## **Star Watch**

**Age Range:** *All Ages*

**Length:** 1+ Hours

Volunteers from the Aldrich Astronomical Society will show the audience the wonders of the stars through the telescopes. This program can be combined with any of the others listed above.

## **Other Topics**

Telescopes, Solar Observing, History of the Apollo Missions.