



Contents

- [Program Update](#)
- [Aerospace News](#)
- [Space Careers](#)
- [Aerospace Opportunities!](#)
- [Sponsors](#)

StellarXplorers VIII National Finals Competition!

Our semifinalists have just completed the round, and our STLX VIII National Finalists have been determined!

Finalists will receive an all expense-paid trip to Houston, where they will tour Space Center Houston, space station and satellite design facilities. Teams will compete in orbital planning, satellite design, and launch design scenarios bringing together all the skills they learned throughout the competition year into one finals challenge.



STELLARXPLOREERS VIII



National Finalists

Buena Park High School AFJROTC #1	Buena Park, CA
Buena Park High School AFJROTC #2	Buena Park, CA
California Academy of Math and Science #1	Carson, CA
Edmond North High School #1	Edmond, OK
North Allegheny High School AFJROTC #2	Pittsburgh, PA
Palos Verdes Peninsula High School #3	Rolling Hills Estates, CA
Pueblo County High School #1	Pueblo, CO
Red Mountain High School #2	Mesa, AZ
The Science Academy STEM Magnet #1	North Hollywood, CA
Valencia High School AFJROTC #1	Valencia, CA

StellarCamp Update

StellarCamp Registration is Open!

StellarCamp is a fun space system design camp for rising 8th through rising 12th graders. Participants get to learn about aspects of space system design with no prior experience required.

After a successful pilot 2021 Summer season, StellarXplorers will be supporting 2022 StellarCamps this coming summer nationwide in areas where there are already StellarXplorers teams and new areas, too!

Approved organizations register via our StellarXplorers [portal](#) for their week/s of StellarCamp consisting of instruction modules and information to conduct the competition on the fifth day, accompanying instructor guide, student workbooks, and demonstration software that the students will use to follow along with the instructions.



StellarCamps will be conducted by instructors from your local school or organization. As host organizations register with us to conduct a StellarCamp this summer, we'll list the dates and locations of these camps. Students will register via their local organization for StellarCamp, not through our StellarXplorers portal. A list of available camp locations and dates will be posted as they scheduled.

For more information, visit our [website!](#)



Aerospace News

[Your Name can fly around the moon NASA's Artemis 1 Mission](#)

You can send your name on a trip around the moon with just a few clicks of your keyboard.

NASA is inviting people to put their names on a flash drive that will launch on the agency's Artemis 1 mission, which will send an uncrewed Orion capsule around the moon and back a few months from now.

Coming aboard in this manner is easy and free; just click the "get boarding pass" button at [this NASA page](#).

The SLS-Orion stack that will fly Artemis 1 is scheduled to roll out to its launch pad at NASA's Kennedy Space Center in Florida on March 17 for a "wet dress rehearsal," which will put the vehicles through most of the processes they'll experience on launch day.



[Curiosity Rover Snaps Close-Up of tiny "mineral flower" on Mars](#)



NASA's Curiosity rover recently got up close and personal with a tiny, flower-like mineral deposit on the surface of Mars. The beautiful branching rock, which is just 0.4 inch (1 centimeter) wide, looks a bit like a coral or a sponge. Despite its likeness to a living organism, however, the deposit is not alive and is a fairly common sight across the Martian landscape.

Curiosity snapped a picture of the tiny mineral flower on Feb. 25 near Aeolis Mons, also known as Mount Sharp, at the heart of the 96-mile-wide (154 kilometers) Gale crater, which the rover has been studying since its arrival on the Red Planet in 2012.

The flower-like rock, which has been named the Blackthorn Salt, is a diagenetic feature, or one made from minerals that precipitated from ancient water that had previously been mixed with Martian rock.

[James Webb Space Telescope will study super-bright quasars to understand early universe](#)

Some of the James Webb Space Telescope's first science investigations will probe the role that bright objects called quasars played in early galaxy evolution.

Quasars are distant objects powered by black holes typically a billion times as massive as our sun. They emit energies that can climb to trillions of electron volts, exceeding the total output of all the stars in a typical galaxy.

Scientists, Webb officials said in a 2021 statement, "will examine what part quasars play in galaxy evolution during these early times. The team will also use the quasars to study the gas in the space between galaxies in the infant universe."

Once Webb finishes its commissioning period this summer, the telescope will be tasked with several quasar programs. For example, Webb will look at six of the most distant and luminous quasars to situate these objects in the timeline of galactic evolution. Quasars will also be used to look at gas distribution between galaxies.



StellarXplorers Sponsors

Presenting Sponsor—Lockheed Martin



StellarDiamond



StellarGold



Educational Alliance Partners



Space Careers

Systems Engineering

Systems engineering is an interdisciplinary field of engineering and engineering management that focuses on how to design, integrate, and manage complex systems over their life cycles. At its core, systems engineering utilizes systems thinking principles to organize this body of knowledge. The individual outcome of such efforts, an engineered system, can be defined as a combination of components that work in synergy to collectively perform a useful function.



"My job title is systems engineering but I work with animation and modelling to run simulations and create training modules for those assembling the space crafts prior to launch. I call it space cartoons! I love that I get to tap into my artistic side with creating small movies and video games but I also love that the work I do is important with helping a space vehicle up to launch. Plus it is really amazing to get to work on Cape Canaveral and get to see launches all the time. There is one in a few hours and I am allowed to watch from my building which is really close to the launch pads. It's a great reminder of how incredible the work we do at Lockheed Martin Space really is." - Ally Bythell, LM Space

Aerospace Opportunities!

Lockheed Martin 2021 Scholarship Program Launch

The [**Lockheed Martin STEM Scholarship Program**](#) is open to students pursuing bachelor's degrees in engineering, computer science, or physics who show need and come from underrepresented or underserved communities. Up to 200 scholarships of \$10,000 each are offered for full-time study at a U.S. accredited four-year institution. The deadline to apply is April 1, 2022.

The [**Lockheed Martin Vocational Scholarship Program**](#)

is open to students pursuing associate degrees, credit-bearing certificates or industry-recognized credentials in technology and advanced manufacturing disciplines. Up to 150 scholarships of \$5,000 each are offered for study at a U.S. accredited vocational-technical school, trade school, two-year community college or state college. The deadline to apply is April 1, 2022.