



NATIONAL SPACE DESIGN COMPETITION

Meet the National Finalists of the 2023-2024 Space Design Competition



The StellarXplorers National Finals Competition is set for April 18-20, 2024, in Denver, CO. [Meet this year's national finalist teams](#) who are vying for the title of National Champions! Winners will be announced at the Awards Banquet on Saturday, April 20.

Teams will spend eight hours on Friday, April 19 completing their final mission of the season, with one collective scenario that tests their orbit planning, satellite design, and launch operations skills. During that eight-hour period teams must also compile a 4-slide PowerPoint presentation that will serve as their mission debriefing. The debriefing will be presented the following morning to a panel of expert judges, outlining the team's solution and process for finding their answer. An academic quiz will also be taken by each competitor.

To view photos from the event, check out the [Flickr album](#) (updated daily during event).

2024-2025 Space Design Competition Registration to open on May 1

Registration for the next season of the National Space Design Competition will open on May 1. Registration will remain open through mid-October. Visit the www.stellarxplorers.org/team-registration to learn more.



STELLARCAMPS



Looking for STEM programs to offer students during the summer or want to bolster your StellarXplorers skills? We've got you covered!

Individuals and organizations interested in a space-focused summer camp can now [purchase our StellarCamps curriculum](#) for \$99. Once purchased, the curriculum is yours to keep.

Participants learn about space systems (just like what they would be learning in our National Space Design Competition), **and no prior experience is required!**

StellarCamps are best suited for middle and high school students who are just getting into aerospace and want to learn more.

SPONSOR NEWS

Air & Space STEM Outreach – Upcoming Virtual Events



Check out upcoming events from Air and Space STEM Outreach that include a wide variety of topics from across aerospace fields and beyond. Discover dynamic air shows, teacher professional development classes, insightful talks from leading experts, and career exploration opportunities. Visit www.dafstem.us/participate/events/ to register.

STEMtoSky Series: Not your Typical Air Force Job	Life Cycle of an Aircraft
May 10 12:00-1:00 PM ET	May 17 12:00 – 1:00 PM ET
Exploring careers beyond airplanes and aviation in the Air Force	Learn about the life cycle of an aircraft, from the engineers who build, to the pilots who fly and the technicians who maintain them.

SSAI and the Bahethi Family Foundation partnering to provide scholarship opportunities



The BFF Riya Bhakkad Memorial Scholarship Program focuses on inclusivity and diversity in professional development committed to shattering barriers and implicit unconscious bias in recruitment, aimed at empowering underrepresented groups. It's a step towards creating a diverse workforce enriched with highly qualified candidates from various backgrounds. This program aims to increase visibility for leaders in diversity, enhance engagement, and attract top talent from underrepresented and disabled communities.

Selected recipients will receive a scholarship of up to \$10,000 to participate in a 12-week program with an advisor from SSAI in a remote environment for the duration of the program. In addition to technical training within STEM fields, this program will offer and support professional development training tailored to each intern.

The application window for the Summer 2024 session opens this Monday, March 18th and will close April 19th. For more information, visit <https://bahethifoundation.org/scholarship/>.

ULA Launches final Delta Rockets after 64 years



The Delta program, spanning 60 years, came to a close with the launch of the final Delta IV Heavy rocket by United Launch Alliance (ULA) on April 9 at 12:53 p.m. EDT from Space Launch Complex-37 at Cape Canaveral Space Force Station, Florida. The rocket, carrying the NROL-70 mission for the National Reconnaissance Office, marks the end of the Delta era and initiates the future of heavy lift on ULA's next generation Vulcan rocket.

[Click here](#) to read the full press release.

STEM RESOURCES

Join the StellarXplorers Alumni Network

The StellarXplorers Alumni Network is intended to connect program alumni with each other and with program sponsors and supporters from industry and academia. Within this group we will share networking opportunities, available internships, job postings, and more!

This is a private group for past and present StellarXplorers participants. You must be at least 16 years of age to join, per LinkedIn account regulations. All requests to join will be reviewed by StellarXplorers staff to verify participation in the program.



To join, visit: <https://www.linkedin.com/groups/12721859/>

SPACE NEWS



Curious About What's Happening Overhead?

Check out the Space.com [Space Calendar](#) to stay up to date with upcoming planned rocket launches and skywatching-worthy dates.

And in case you missed it...

23 MAR 2024 | [SpaceX Falcon 9 rocket ties reuse record with 19th launch \(video\)](#)

29 MAR 2024 | [NASA's 1st female chief engineer at KSC wants to put a space station around the moon](#)

31 MAR 2024 | [Pluto TV will rally to make Pluto a planet again on April 1 \(it's no joke\)](#)

1 APR 2024 | [James Webb Space Telescope joins the hunt for newborn exoplanets](#)

1 APR 2024 | [SpaceX Falcon Heavy rocket photobombs the moon in incredible award-winning shot](#)

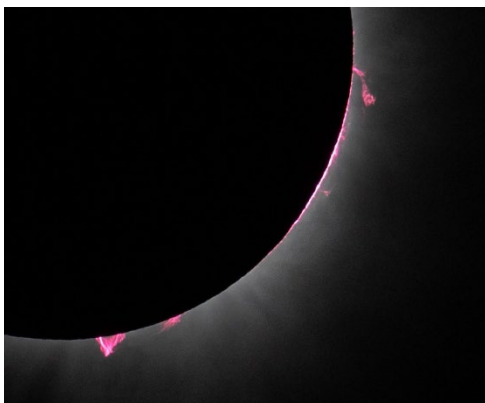
3 APR 2024 | [NASA picks 3 companies to design lunar rover for Artemis astronauts to drive on the moon](#)

4 APR 2024 | [Blue Origin will launch Ed Dwight, the 1st-ever Black astronaut candidate, to space on next New Shepard rocket flight](#)

7 APR 2024 | [White House directs NASA to create a new time zone for the moon](#)

8 APR 2024 | [Total solar eclipse 2024 thrills millions across North America \(video, photos\)](#)

10 APR 2024 | [US needs new space tech or it 'will lose,' Space Force chief says](#)

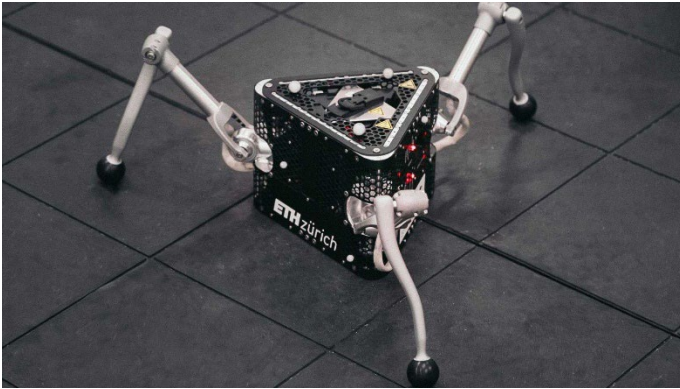


View NASA's 2024 Total Solar Eclipse Album on Flickr:

<https://flic.kr/s/aHBqjBjHwY>

JUST FOR FUN

Spacehopper: Three-legged jumping robot to study asteroids in space



Students at ETH Zurich are creating a robot that can move around in extremely low gravity by hopping like a human.

The project is part of the SpaceHopper initiative, which aims to create a robot that can move like a jumper in conditions where gravity is at a premium.

SpaceHopper is a lightweight platform specifically engineered for low-gravity mobility. The robot is made of space-qualified parts and has a body size of 245 mm. It weighs 11.4 pounds (5.2 kilograms).

The device employs its three legs to realign the body during flight in preparation for landing in place of gyroscopes or flywheels. The team leveraged Deep Reinforcement Learning strategies to regulate the leg motion for reorientation. See SpaceHopper in action in this [YouTube video](#), or read more about it at InterestingEngineering.com.

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We would love to share any stories about your team. Send them our way: info@stellarxplorers.org.

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