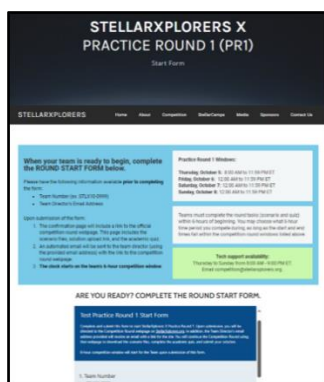




## NATIONAL SPACE DESIGN COMPETITION

### StellarXplorers X Practice Round 1 (PR1) starts October 5



Practice Round 1 Competition Windows:  
**8 AM ET on October 5 until 11:59 PM ET on October 8**  
**8 AM ET on October 12 until 11:59 PM ET on October 15**

New this season, there are two competition windows for Practice Round 1 (PR1), to enable more teams the opportunity to participate in this first round of StellarXplorers.

Approved team directors will have received an email with information to help their teams prepare for PR1's start. Teams should only participate in **one** of PR1's competition windows.

In order to help ensure teams are up-to-date on all competition round communication, we've established a new page on the StellarXplorers website: [Announcements](#). All important announcements before, during, and after a competition round will be shared on this page. Teams are encouraged to have this page open (and refreshed) while competing.

### It's not too late to register for StellarXplorers X



Registration for the 2023-2024 competition season is **open through October 17**. Don't wait, [register your team today!](#)

Team directors are not required to have prior experience with the competition, nor do team directors need to have experience with Systems Tool Kit (STK) or orbital mechanics to serve in the role. The competition focuses on the problem-solving side of space system design and less on advanced physics or equations.

[Click here](#) for information about the upcoming season, including dates, deadlines, and registration fees.

If you've already registered a team but have the need for additional teams, you must complete the registration form again. Please do this by the October 17 deadline.

## New Technical Mentor Database available - Find/Confirm a Mentor today!

Looking for a mentor to help your team? Team directors now have access to the new **Mentor Database** (the link to the database was shared in an email last month. It will also be included in the approval email for those teams that aren't yet approved). We encourage team directors to use the information to contact available mentors via email. Once a mutual mentorship match has been made (or if you already have a mentor lined up), please let us know by completing the Mentor Match Form.

**Find a Mentor**

Technical mentors play a major role in the StellarXplorers National Youth Space Design Competition. They support the team directors in preparing the teams for the competition rounds, and act as role models for the student participants, sharing insight into education and career opportunities in the space sector.

Every team participating in the competition is allowed as much support from as many technical mentors as they wish. If you are in need of a mentor, please use the list below to contact an individual in your area (or virtually) who is willing to help.

A HUGE thank you to all our mentors who are volunteering their free time to help support STEM education for our youth.

If you already have a mentor, please let us know who you're working with by completing the mentor match form below:

[MENTOR MATCH FORM](#)

THIS LIST CONTAINS PERSONAL CONTACT INFORMATION.  
IT IS FOR TEAM DIRECTOR USE ONLY AND MUST NOT BE SHARED WITH ANYONE OUTSIDE OF THE COMPETITION.

Name	Email	Phone	Location
John Smith	john.smith@starcorp.com	555-123-4567	San Francisco, CA
Jane Doe	jane.doe@spacelab.org	555-987-6543	New York, NY
Bob Johnson	bob.johnson@rocket.com	555-234-5678	Los Angeles, CA
Alice Brown	alice.brown@satellite.com	555-345-6789	Chicago, IL
Charlie White	charlie.white@space.com	555-456-7890	Houston, TX

The Mentor Database will be updated as newly approved mentors are identified. Additionally, as matches are made, we'll be removing mentors that no longer have availability to support teams. In order to keep this information accurate, we will need your help by submitting mentor match forms in a timely manner upon connecting with a mentor.

## Registration Open for Technical Mentors



StellarXplorers teams are typically led by teachers, but not all teachers feel equipped to prepare their students for the competition. Because of this, **many teams rely on technical mentors** (aka the space professionals) to help them prepare.

If you have a strong understanding of determining orbits, selecting satellite components, and/or choosing the optimal launch vehicle for a mission – you should consider being a mentor. The time commitment is up to the mentor, and the schedule agreed up on with the team director, and mentorship can be conducted virtually or in person.

**Registration is required for all new and returning mentors.**

A background check will be requested of all individuals who register for this role.

Our goal is to provide a technical mentor to every team that requests assistance. [Click here for complete details and to register today.](#)

## Nova Space StellarXplorers Space Foundations Course Available for StellarXplorers X Teams

Thanks to the generous support of Nova Space Inc, we're able to provide StellarXplorers Space Foundations course to StellarXplorers teams to help them prepare for the Academic Quiz portion of the Competition. Approved team directors will receive an email with instructions for setting up their accounts and providing access to their teams. *For questions or help navigating the LMS or course material, please contact [support@novaspaceinc.com](mailto:support@novaspaceinc.com).*



## Competition & Rules Updates for StellarXplorers X

At the end of each season, we review the rules book and make updates. With the competition season starting soon, we wanted to highlight a few of the more significant rules changes:

1. Changes to competition window.
  - The starting time on Thursday has been changed from 12:00 AM ET to 8:00 AM ET.
  - Teams competing on Sunday may begin after 6:00 PM ET but are still held to the submission deadline of 11:59 PM ET.
2. Changes to the Academic Quiz completion timeline
  - The quiz may no longer be completed at any point during the four-day competition window. It must be completed within the team's chosen 6-hour competition period.
  - The 30-minute time limit to complete the Academic Quiz has been removed. Teams now have the full 6 hours from their competition start time to complete and submit the quiz.
3. Changes to number of accepted submissions
  - Teams may no longer submit up to three scenario solution submissions. If a team wishes to submit an updated solution to correct an error or change selections in an effort to increase their score, only one additional solution submission will be accepted.
  - The second submission must fall within the team's 6-hour competition period AND within one (1) hour of the original submission.
4. Additional Practice Round 1 Window
  - A second Practice Round 1 window has been added for October 5-8, 2023.

The complete StellarXplorers Rules Book is always available on our [website](#).

## SPONSOR NEWS

### 2024 Lockheed Martin Space Summer High School Internship Applications to Open October 5

The Lockheed Martin Space High School Internship program is designed to give students the opportunity to work with aerospace scientists and engineers. Lockheed Martin Space High School Interns spend 9+ weeks over the summer working on Lockheed Martin Space projects. Interested candidates should sign up to attend one of four upcoming virtual information sessions, and can learn more about the program, recruiting timeline, and application process by visiting [Lockheed Martin's High School Intern Webpage](#).



Links to the application will be posted to the website on Oct 5, and applications will be open from Oct 5 – Jan 5.

### L3Harris Renews StellarXplorers Sponsorship



During the Air & Space Forces Association's 2023 Air, Space & Cyber Conference, L3Harris Technologies presented a \$50,000 check to the AFA StellarXplorers Program.

L3Harris is a longtime sponsor of the STEM program, and their support continues to help excite the next generation of the space workforce! [Click here to view the presentation.](#)

## STEM RESOURCES

### Join the StellarXplorers Alumni Network

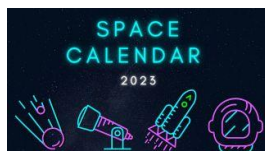
The StellarXplorers Alumni Network is intended to connect program alumni with each other and with program sponsors and supporters from industry and academia. Within this group we will share networking opportunities, available internships, job postings, and more!

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 [2023 Space Calendar](#) to stay up to date with upcoming planned rocket launches and skywatching-worthy dates.

**\*\*\*ALERT: [Annular Solar Eclipse on Oct. 14: How to Watch In Person and Online](#)\*\*\***

And in case you missed it...

- 2 SEP 2023 | [India launches Aditya-L1 solar observatory, its 1st-ever sun probe](#)
- 4 SEP 2023 | [SpaceX's Crew-6 astronauts splash down after 6-month stay on ISS](#)
- 5 SEP 2023 | [Black holes keep 'burping up' stars they destroyed years earlier](#)
- 6 SEP 2023 | [Earliest magnetic galaxy ever detected offers clues about Milky Way history](#)
- 7 SEP 2023 | [Japan launches moon lander, X-ray telescope on space doubleheader](#)
- 8 SEP 2023 | [Astronauts just 3D-printed knee cartilage in space for the 1st time & it's as weird as it sounds](#)
- 9 SEP 2023 | [US Space Force rolls out lean new mission statement](#)
- 11 SEP 2023 | [Exoplanet's surface may be covered in oceans, James Webb Space Telescope finds](#)
- 12 SEP 2023 | [India, NASA to cooperate on human spaceflight, planetary defense](#)
- 13 SEP 2023 | [NASA's Lucy asteroid probe shoots 1st photo of 'Dinky' space rock](#)
- 14 SEP 2023 | [Humanity's current space behavior 'unsustainable,' European Space Agency report warns](#)
- 18 SEP 2023 | [A squishy robot built for Mars is helping 1st responders on Earth in rescue operations](#)
- 19 SEP 2023 | [Asteroid hit by NASA's DART spacecraft is behaving unexpectedly](#)
- 24 SEP 2023 | [NASA's OSIRIS-REx lands samples of asteroid Bennu on Earth in historic first](#)
- 27 SEP 2023 | [1st black hole imaged by humanity is confirmed to be spinning, study finds](#)
- 29 SEP 2023 | ['Einstein ring' snapped by Webb telescope is most distant gravitationally lensed object ever seen](#)

## Images from space:



### [Globular cluster glitters in stunning new Hubble telescope photo](#)

The globular cluster Terzan 12 lies 15,000 light-years from Earth. It is nestled deep in the Milky Way, in the constellation of Sagittarius. Its aging stars appear bright red due to the clouds of interstellar dust and gas that obscure our view. (Image credit: NASA, ESA, ESA/Hubble, Roger Cohen (RU))



### [Stunning James Webb Space Telescope image shows young star blasting supersonic jets](#)

NASA's James Webb Space Telescope's high resolution, near-infrared look at Herbig-Haro 211 reveals exquisite detail of the outflow of a young star, an infantile analogue of our sun. (Image credit: ESA/Webb, NASA, CSA, Tom Ray (Dublin))

## JUST FOR FUN

### Perseverance Rover Spies 'Avocado' Rock on Mars



NASA's Mars rover Perseverance snapped this photo of a rock that looks like an avocado on Sept. 8, 2023. (Image credit: NASA/JPL-Caltech/ASU)

Since landing on Mars on Feb. 18, 2021, the rover has traversed the planet's Jezero Crater in search of signs of ancient life. Along its journey, the robotic rover has encountered some intriguing Red Planet features.

Among them is a pair of rocks, photographed on Sept. 8, that resembles a ripe avocado cut in half. One rounded half lies upside down in the foreground of the image, while the other half appears to have a distinct pit in its center. The rugged surface of the rock even mirrors the dimpled, leathery texture of an avocado peel.

[Click to read more on Space.com.](#)

## Stay in the Know!



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

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