SPACE ACE



In April 2026, NASA's Artemis II mission set a new record for human distance from Earth—252,756 miles (406,771 km)! Dr. Steve Scotti, *Brilliant Star*'s STEAMS Education Advisor and Distinguished Research Associate at NASA Langley Research Center, answered our cosmic questions about the mission!



Why was the Artemis II mission significant for humanity?

It was the first time a crew flew aboard the Orion spacecraft, and many systems they needed hadn't been used in space. The life support system proved it could provide oxygen and remove carbon dioxide. The environmental control system maintained the cabin temperature and humidity. The crew tested a "storm shelter" that would help protect them from radiation in a solar storm. On Earth, nature's "systems" that keep us alive are often taken for granted. In space, you need to bring them with you.

Another objective was safely flying a crew to the Moon, which we hadn't done in over 50 years. The technical systems worked very well. On a human level, the crew created hopeful moments around the world by sharing the perspective of Earth as seen from beyond the Moon. To me, it called to mind the quote by 'Abdu'l-Bahá, "This is one globe, one land, one country. God did not divide it into national boundaries." —Steve





Left: The Artemis II rocket launches on April 1, 2026. **Above:** NASA astronaut Christina Koch hugs the Orion spacecraft after landing.

How did you feel about the Artemis II mission, and why?

I was actually a little nervous—I was concerned for the astronauts' safety. When the prior uncrewed flight (Artemis I) returned from the Moon in 2022, the heat from entering the atmosphere at nearly 25,000 mph (40,000 km/h) unexpectedly caused large chunks of the heat shield to **spall**, or break off. If too much had spalled off, the vehicle could have been destroyed. NASA needed to learn why the spalling happened and how to prevent it. I helped with that investigation. We learned the root cause, and we reduced the damage by flying a path with a shorter heating time. But there was still some risk of heat shield damage, which NASA and the crew knew about and accepted. Fortunately, from what we've seen so far, the damage to the Artemis II heat shield was much less severe than with Artemis I. —Steve



Aboard the Orion spacecraft (from left): Christina Koch, Jeremy Hansen, Victor Glover, and Reid Wiseman

ON THE WEB



Scan the QR code with a smartphone to check out our interview with Christina Koch and learn more about the Artemis II mission!

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