

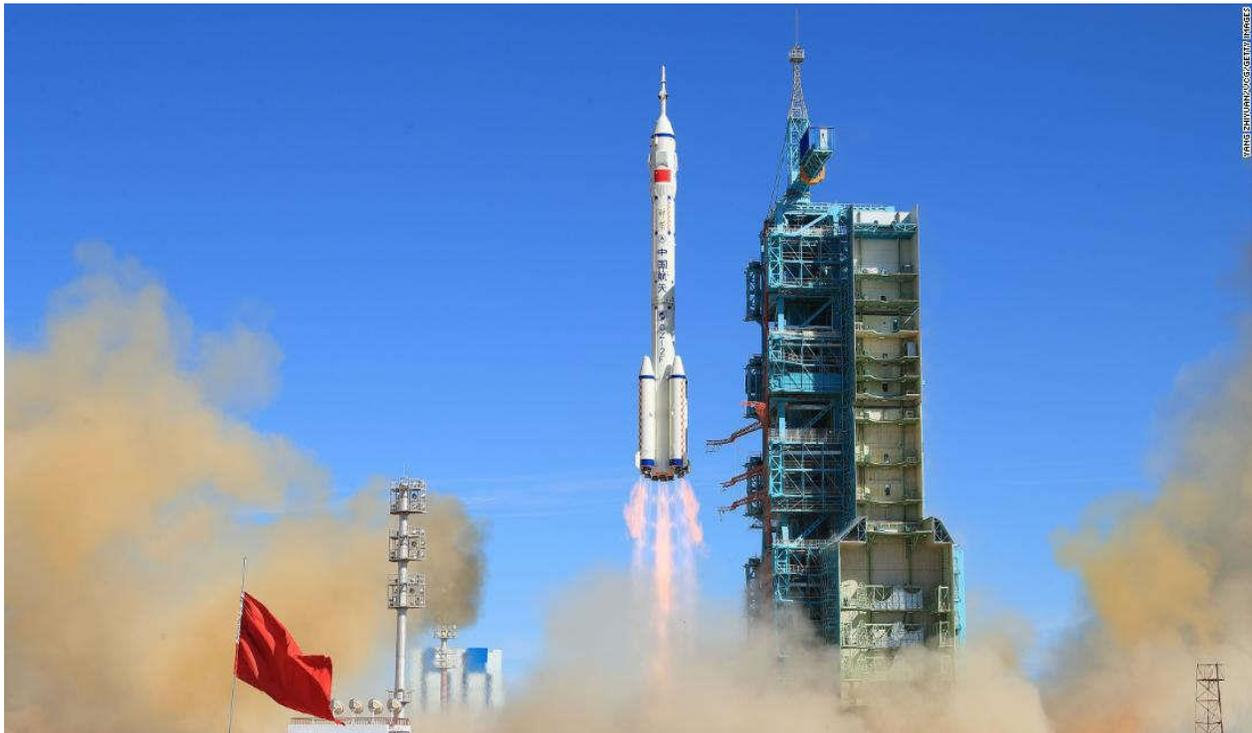
FEATURE

US-China rivalry is extending from Earth into space.

That poses a challenge to American dominance

Editor's note: CNN has today launched the Meanwhile in China newsletter, a three-times-a-week update exploring what you need to know about the country's rise and how it impacts the world. [Sign up here.](#)

<https://www.cnn.com/2021/06/21/china/china-us-space-race-mic-intl-hnk/index.html>



© Yang Zhiyuan/VCG/Getty Images The Shenzhou-12 spacecraft is launched from the Jiuquan Satellite Launch Center on June 17, 2021 in Jiuquan, Gansu Province of China. China launches the Shenzhou-12 spacecraft, carried on the Long March-2F rocket, to Chinese Tiangong space station.

When it comes to the intensifying rivalry between the United States and China, the sky is by no means the limit.

As the two countries jockey for economic, technological, geopolitical and even ideological superiority on Earth, space has become a natural extension -- and crucial frontier -- in their great power competition.

And due to the inherent dual-use nature of space technologies, what's at stake extends far beyond mere scientific prestige and global

standing. In addition to national defense, so much of our life on Earth -- from digital communications to navigation -- depends on satellites in space.

Following the demise of the Soviet Union's space program, the US has enjoyed a period of unparalleled leadership in space. But in recent years, US [observers](#) and [politicians](#) have warned that America's dominance could soon be challenged by China's fast-growing space capabilities.



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That concern has only deepened with a series of important and high profile Chinese achievements: In 2019, it became the first country to land on the far side of the moon; last year, it successfully put into orbit its final Beidou satellite, setting the stage to challenge the US Global Positioning System (GPS); and last month, it became the only country after the US to put a functioning rover on Mars.

That particular breakthrough prompted NASA's new administrator Bill Nelson to warn against American complacency in face of China's space ambitions. [At a House hearing](#) last month, he held up an image taken by the Chinese rover on Mars, called China "a very aggressive competitor," and lobbied Congress to fund NASA's plans to bring humans back to the moon.

Despite its advancements, China's space technology still lags behind the US. But China's space program is flush with political and monetary support from the ruling Communist Party, which views its success as a key measure of its intentional standing and domestic legitimacy.

Last week, US-China competition in space entered a new phase when three Chinese astronauts arrived on the country's still-under-construction space station for a three-month stay. The only other space station in orbit is the International Space Station (ISS), a US-led collaboration with Russia, Europe, Japan and Canada.

For the past 23 years, the ISS has been visited by [more than 200 astronauts from 19 countries](#) -- except China. Since 2011, NASA has been effectively banned from cooperating with China, after Congress passed [the Wolf Amendment](#) due to espionage-related concerns.

That exclusion has at least in part spurred Beijing to build its own space station, the Tiangong, which is expected to be completed by the end of next year -- two years before the ISS is scheduled to be decommissioned in 2024. If the US and its international partners [do not decide to extend](#) the ISS's operational life, China's Tiangong space station may soon become the only crewed outpost in orbit -- one that NASA astronauts are barred from joining by US law.



© CCTV Three Chinese astronauts board the core module of China's still-under-construction space station on Thursday.

While the ISS was primarily a US-Russian venture born out of the ashes of the Cold War, China's Tiangong is being built amid talks of a new Cold War. And it is likely that in the years to come, alliances in space will increasingly mirror the geopolitical lines on Earth.

Already, Chinese space officials have made clear they wish to welcome foreign astronauts aboard its space station upon completion. China is also joining hands with Russia to build [a joint research station](#) on the

moon's south pole by 2035 -- a facility that will be open to international participation.

The US, meanwhile, is building its own international coalition to establish basic principles for safe and responsible lunar explorations. The [Artemis Accords](#), released by NASA in May last year, have been signed by [12 countries](#), including the US and key allies such as Britain, Australia, Canada, Japan and South Korea.

Neither China nor Russia is a signatory.