Astronomers may have found a third interstellar object

There is a growing buzz in the astronomy community about a new object with a hyperbolic trajectory that is moving toward the inner Solar System.

Early on Wednesday, the European Space Agency confirmed that the object, tentatively known as A11pl3Z, did indeed have interstellar origins.

“Astronomers may have just discovered the third interstellar object passing through the Solar System!” the agency’s Operations account shared on Bluesky. “ESA’s Planetary Defenders are observing the object, provisionally known as #A11pl3Z, right now using telescopes around the world.”

Only recently identified, astronomers have been scrambling to make new observations of the object, which is presently just inside the orbit of Jupiter and will eventually pass inside the orbit of Mars when making its closest approach to the Sun this October. Astronomers are also looking at older data to see if the object showed up in earlier sky surveys.

An engineer at the University of Arizona’s Catalina Sky Survey, David Rankin, said recent estimates of the object’s eccentricity are about 6. A purely circular orbit has an eccentricity value of 0, and anything above 1 is hyperbolic. Essentially, this is a very, very strong indication that A11pl3Z originated outside of the Solar System.

https://arstechnica.com/space/2025/07/astronomers-may-have-found-a-third-interstellar-object/