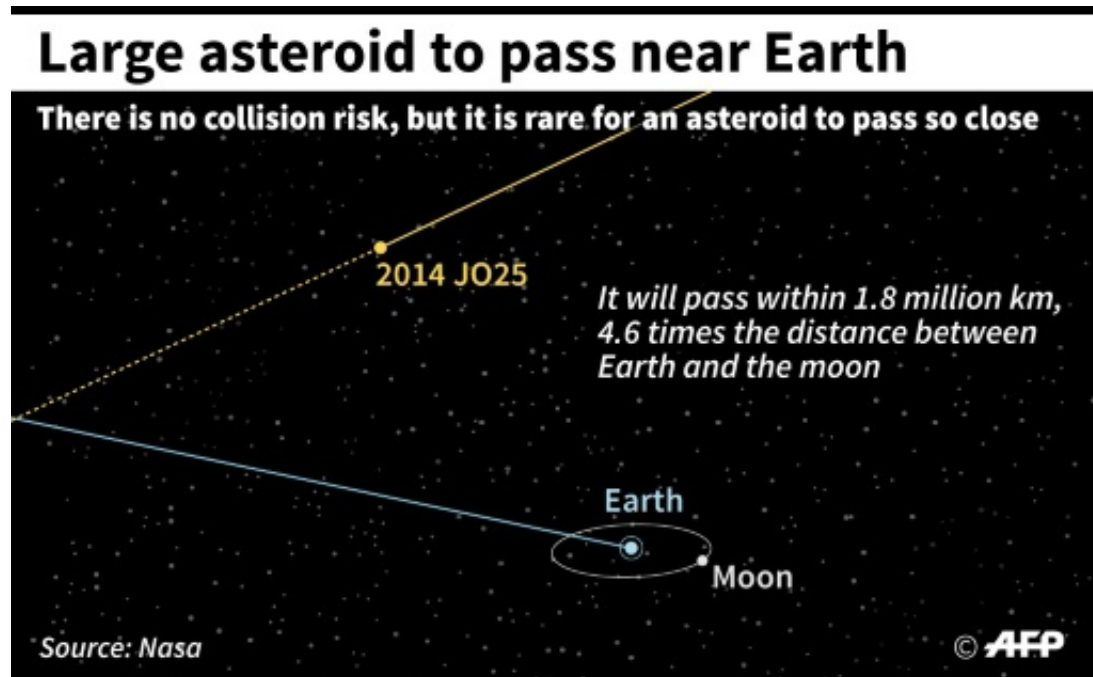


Big space rock to streak past Earth on Wednesday

April 18 2017



Large asteroid to hurtle past Earth

An asteroid stretching 650 metres (2,000 feet) across is on track to whoosh past Earth on Wednesday at a safe—but uncomfortably close—distance, according to astronomers.

"Although there is no possibility for the asteroid to collide with our planet, this will be a very close approach for an asteroid this size," NASA's Jet Propulsion Laboratory said in a statement.

Dubbed 2014-JO25, the asteroid will come within 1.8 million kilometres (1.1 million miles) of Earth, less than five times the [distance](#) to the Moon.

It will pass closest to our planet after having looped around the Sun.

2014-JO25 will then continue on past Jupiter before heading back toward the centre of our Solar System.

Smaller asteroids whizz by Earth several times a week. But the last time one at least this size came as close was in 2004, when Toutatis—five kilometres (3.1 miles) across—passed within four lunar distances.

The next scheduled close encounter with a big rock will not happen before 2027, when the 800-metre (half-mile) wide asteroid 199-AN10 will fly by at just one lunar distance, about 380,000 km (236,000 miles).

The last time 2014-JO25 was in our immediate neighbourhood was 400 years ago, and its next brush with Earth won't happen until sometime after 2600.

The April 19 flyby is an "outstanding opportunity" for astronomers and amateur stargazers, NASA said.

"Astronomers plan to observe it with telescopes around the world to learn as much about it as possible," the US space agency said.

Besides its size and trajectory, scientists also know that its surface is twice as reflective as that of the Moon.

It should be visible with a small optical telescope for one or two nights before moving out of range.

2014-JO25 was discovered in May 2014 by astronomers at the Catalina Sky Survey near Tucson, Arizona.

Also on Wednesday, a comet known as PanSTARRS will make its [closest approach](#) to Earth at a "very safe" distance of 175 million km (109 million miles), according to NASA.

The comet has brightened recently and should be visible in the dawn sky with binoculars or a small telescope.

Asteroids are composed of rocky and metallic material, whereas comets—generally smaller—are more typically made of ice, dust and rocky stuff.

Both were formed early in the history of the Solar System some 4.5 billion years ago.

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