



SKY
tonight.com

 PRINT THIS

Astronaut Seeks Craft to Bump Asteroids

January 24, 2007

Associated Press/AP Online

HONOLULU - NASA astronaut and former University of Hawaii solar physicist Edward Lu is calling for a new spacecraft that would divert asteroids on a path to slam into Earth.

The small space tractor, costing between \$200 million and \$300 million, would hover near an asteroid to exert enough gravitational pull that the space rock's orbit would change and a collision with our planet would be averted, Lu said before a crowd packed into a 300-capacity auditorium at the University of Hawaii-Manoa Monday night.

"We're only trying to get a really tiny change in the velocity of the asteroid to prevent an impact," he said.

Lu was part of a panel including three Hawaii scientists who characterized the chances of an asteroid colliding with Earth as rare but deserving of the same level of attention as major earthquakes, tsunamis and hurricanes.

A report on the appearance appeared on the Honolulu Star-Bulletin Web site on Tuesday.

The asteroid Apophis will pass within about 20,000 miles of Earth on Friday, April 13, 2029.

"It's going to come so close to the Earth in 2029 that its orbit will change and it might change enough so that it comes back and hits us in 2036," said Hawaii planetary astronomer David Tholen, who discovered Apophis.

During the asteroid's next close pass to the sun in 2013 that risk will be assessed in radar surveys, he said.

Objects the size of a grain of sand frequently hit the Earth's atmosphere, appearing as shooting stars in the night sky. But a larger impact could be devastating. Asteroids are blamed for the death of the dinosaurs 65 million years ago and an explosion over Tunguska, Russia, in 1908 that wiped out 60 million trees over a 830-square-mile area.

According to a presentation by university astronomer Robert Jedicke, a Tunguska-size explosion would be able to blast or burn nearly all of Oahu.

Because the devastation would be great, the risk to a person of perishing in a major asteroid collision is about 1 in 10,000 or 20,000 over a 100-year lifetime - the same dying in a plane crash, Jedicke said.

The University of Hawaii's Pan-STARRS program would train four powerful digital cameras toward the heavens to watch for would-be intruders.

Officials from the project are hoping to garner public support of a plan to locate on Mauna Kea. The telescopes also could be built at two sites on Haleakala, where a prototype is being built, but scientists warn the project would take twice as long to complete there.

Environmentalists and Hawaiian activists have argued against additional development on Mauna Kea and some scientists have expressed concern about additional construction as the volcano already hosts 13 telescopes.

The program would be able to provide decades of warning of an impending impact, the scientists said.

That would be enough time to launch a tractor spacecraft to knock the asteroid into a safe orbit, said Lu, who spent six months aboard the International Space Station in 2003 and was a postdoctoral fellow at the University of Hawaii's astronomy institute from 1992 to 1995.

To do nothing would be to invite disaster, he said.

"If we are wiped out by an asteroid, that will be our own fault at this point," he said.

On the Net:

University of Hawaii's Pan-STARRS program: <http://pan-starrs.ifa.hawaii.edu/public/>

Find this article at:

<http://www.skytonight.com/news/wires?id=102457719&c=y>

Check the box to include the list of links referenced in the article.