

Planets beyond Milky Way discovered for first time

A team of scientists from University of Oklahoma has discovered for the first time a population of planets beyond the Milky Way galaxy.

The planet population, ranging from the size of the Moon to the size of Jupiter, were spotted in a galaxy located 3.8 billion light years away, according to the study published in *The Astrophysical Journal*.

Microensing

For the discovery, the team used a technique called microlensing — a method capable of discovering planets at truly great distances from the Earth.

“We are very excited about this discovery. This is the first time anyone has discovered planets outside our galaxy,” said Professor Xinyu Dai.

“These small planets are the best candidate for the signature we observed in this study using the microlensing technique. We analysed the high frequency of the signature by modeling the data to determine the mass,” Prof. Dai said.

The researchers made the discovery with data from NASA’s Chandra X-ray Observatory, a telescope in space that is controlled by the Smithsonian Astrophysical Observatory.

This study opens a new vista

While planets are often discovered within the Milky Way using microlensing, the gravitational effect of even small objects can create high magnification leading to a signature that can be modeled and explained in extragalactic galaxies.

But until this study, there has been no evidence of planets in other galaxies.

“This is an example of how powerful the techniques of analysis of extragalactic microlensing can be,” said postdoctoral researcher Eduardo Guerras.

“This galaxy is located 3.8 billion light years away, and there is not the slightest chance of observing these planets directly, not even with the best telescope one can imagine in a science fiction scenario,” Mr. Guerras said. “However, we are able to study them, unveil their presence and even have an idea of their masses. This is very cool science,” he said.

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Just what exactly needed such special protection and secrecy is still unknown.

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