

Rocky Finding -- Evidence of Extrasolar Asteroid Belt

January 6 2007

Providing the best evidence yet for an asteroid belt beyond the solar system, new measurements pinpoint the location of such a disk of warm dust surrounding the star Zeta Leporis. As the January 6, 2007 issue of *Science News* reports, this dust lies about the same distance from Zeta Leporis as the solar system's asteroid belt lies from the sun. Margaret M. Moerchen and Charles M. Telesco and their colleagues at the University of Florida in Gainesville report these findings in an upcoming *Astrophysical Journal Letters*.

According to Ron Cowen, in "Rocky Finding", most other observed disks have been cool and located much further from their parents stars. Assessing this research, Charles Beichman of NASA's Jet Propulsion Laboratory in Pasadena, California finds that "we now have direct evidence for structures around other stars that are directly analogous to the asteroid belt in our solar system."

Further observations of Zeta Leporis have enabled researchers to precisely gauge the size of this dust disk. Additionally, according to Cowen, research finds that the location of the dust is at a distance of 3 astronomical units (AU) from Zeta Leporis, quite similar to the location of the solar system's asteroid belt, stretching from 2.1 to 3.3 AU from the sun.

Noting that asteroids are leftovers from the planet-making process in the solar system, Cowen reports that, while still a young star, Zeta Leporis is old enough to have formed planets. These new studies and findings

“support the thought that Earthlike planets may exist” according to Michael Jura of the University of California, Los Angeles who observed the dust in the disk surrounding Zeta Leporis to find its radius.

Further research will attempt to reveal the shape of the Zeta Leporis’ disk as well as providing insight into its possible formation, continuing efforts to understand the inner territory of our skies.

Source: Science News Magazine

Citation: Rocky Finding -- Evidence of Extrasolar Asteroid Belt (2007, January 6) retrieved 10 April 2024 from <https://phys.org/news/2007-01-rocky-evidence-extrasolar-asteroid.html>

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