

Kuiper, Gerard Peter Encyclopedia Article

Kuiper, Gerard Peter

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.



Contents

Kuiper, Gerard Peter Encyclopedia Article.....	1
Contents.....	2
Kuiper, Gerard Peter.....	3



Kuiper, Gerard Peter

Dutch-American Astronomer 1905-1973

Gerard Peter Kuiper was the father of modern planetary astronomy. His work ran the gamut from star and planetary system formation to the study of the planets themselves. He used techniques ranging from visual observations to those requiring the latest technology, including **infrared** detectors, airborne observatories, and spacecraft.

Kuiper was born in Harenkarspel, the Netherlands. While in his native country, Kuiper made important contributions to the study of binary stars, which led to work on planetary system formation after he moved to the United States.

Gerard Peter Kuiper, astronomer and professor at Yerkes Observatory of the University of Chicago, explaining his theory that there is a disk of comets beyond Neptune's orbit.

During the winter of 1943-1944, Kuiper made **spectrographic studies** of the major planets and satellites, leading to the discovery that Saturn's largest moon, Titan, had an atmosphere containing methane. Studies of the brightnesses of the moons of Uranus and Neptune led to the discovery of additional satellites: Miranda, orbiting Uranus, in 1948; and Nereid, orbiting Neptune, in 1949.

In 1951, he proposed that a disk of comet nuclei extends from the solar system's planetary zone out to as much as 1,000 times the Earth-Sun distance (the astronomical unit [AU]). This is now called the Kuiper Belt and is recognized to extend from Neptune's distance (about 30 AU) to perhaps 50 to 100 AU.

In 1960, Kuiper founded the Lunar and Planetary Laboratory at the University of Arizona. He remained active in his later years, traveling and conducting site surveys for new observatories. Kuiper died in 1973.*

***A now-retired National Aeronautics and Space Administration airborne observatory that made groundbreaking infrared observations from the stratosphere was named after Kuiper.**

See Also

Astronomy, History of (Volume 2); Careers in Space Science (Volume 2); Comets (Volume 2); Kuiper Belt (Volume 2); Neptune (Volume 2); Saturn (Volume 2); Uranus (Volume 2).

Bibliography

Cruikshank, Dale P. "Twentieth Century Astronomer." *Sky and Telescope* 47 (1974):159-164.



Pannekoek, Anton. *A History of Astronomy*. New York: Interscience Publishers, 1961.

Internet Resources

Jewitt, David. "Kuiper Belt." Institute for Astronomy. <<http://www.ifa.hawaii.edu/faculty/jewitt/kb.html>>.