Neugebauer, an astrophysicist who pioneered ways to peer into previously invisible sectors of outer
Gerhart Otto Neugebauer was born in Gottingen, Germany, on Sept. 3, 1932. He then changed his first name to Gerry. He graduated from Cornell with a degree in physics and earned a Ph.D. in physics from Caltech. From 1960 to 1963, Dr. Neugebauer served in the Army, which assigned him to the Jet Propulsion Laboratory where he designed the infrared equipment for the Mariner 2 mission to Venus in 1962, and then was hired at Caltech’s physics faculty.

Early on he worked with Robert B. Leighton of Caltech, who in the early 1960s developed a telescope that Dr. Neugebauer used to sweep the sky from the Mount Wilson Observatory. His persistence was rewarded when he found an object the size of the solar system. It turned out to be a newborn star, a discovery that shed light on how stars are formed. He and his colleagues went on to locate the exact center of the Milky Way.

He was considered a father of the field of infrared radiation, along with Frank J. Low of the University of Arizona. Dr. Neugebauer’s biggest achievement was in detecting and interpreting infrared radiation emanating from outer space. A major advance came in 1983, when he was the scientific director of the Infrared Astronomical Satellite, or IRAS, sponsored by NASA, Britain and the Netherlands, when he helped develop instruments sensitive enough to detect a 20-watt light bulb on Pluto or a speck of dust from a mile away. His team pinpointed more than a half-million sources of infrared radiation in the sky, many of them galaxies. It found rings of debris and dust around stars that were an early clue that planets exist beyond Earth’s solar system.

Dr. Neugebauer was a member of the National Academy of Sciences, the American Philosophical Society and the American Academy of Arts and Sciences. He received the Space Science Award of the American Institute of Aeronautics and Astronautics, and the Herschel Medal of the Royal Astronomical Society in Britain, of which he was a member.

[Condensed and edited extract from the NY Times

http://www.nytimes.com/2014/10/03/us/gerry-neugebauer-pioneer-in-space-studies-dies-at-82.html?_r=0][1]