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Biography of Edwin Hubble

He is regarded as one of the most important astronomers of all time, his achievements revolutionized the field and opened many doors for research for the following astronomers, Edwin Hubble (November 20, 1889 – September 28, 1953) was born in Marshfield, Missouri, U.S. He was known in his younger days for his athletic power rather than his intellectual abilities.



Hubble was a good student but he struggled with spelling. He was playing baseball, football and basketball. He attended University of Chicago where he worked as a lab assistant for Robert Millikan. After graduating, he went to Oxford university where he fulfilled his promise to his father to study law philosophy. After spending some time teaching in a high school, he returned to university of Chicago and received his PhD in astronomy in 1917. His thesis was titled "Photographic Investigations of Faint Nebulae." When America declared war on Germany he rushed to finish his PhD to join the army. Hubble married to Grace Bruke in 1924; he dedicated his life to science and the couple never had children.

The first of his scientific contribution to astronomy was that he discovered that what was considered to be nebulae is actually other galaxies like ours the milky way. Upon his arrival to Mount Wilson, the project 100-in Hooker telescope was finished so Hubble was able to identify

Cepheid variables (a star that is used to determine the distance from the galaxy) Therefore, he is



considered to be the founder of extragalactic astronomy and observational cosmology. The second important contribution was his discovery of what was called later on Hubble's law.

Hubble's law describes the expansion of the universe through the observation of other galaxies moving away from us.

Hubble's law states that the recessional velocity which is determined by the red shift is equal to Hubble constant times the distance ($V = H_0 r$). *

It is remarkable that at that time Astronomy was not considered to be part of physics so there was no noble prize for it. Hubble spent his later part of his life time trying to have astronomy to be included as an area of physics so astronomers would be recognized by the Nobel prize committee for their contributions. His trials failed during his life time but shortly after, the Noble prize committee included astrophysicists to be eligible for the prize however this prize is not the one that can be awarded posthumously.

Edwin Hubble was awarded many prizes in astronomical science, the first was Newcomb Cleveland Prize in 1924 for the discovery of Cepheids in Spiral Nebulae. The second was Bruce Medal in 1938 for his outstanding lifetime contributions to astronomy. He also was awarded Franklin Medal in 1939 and Gold Medal of the Royal Astronomical Society in 1940. In 1946, he won Legion of Merit for outstanding contribution to ballistics research.

A lot of things in astronomy was named after him. Some of them are Asteroid 2069 Hubble, The crater Hubble on the Moon and the orbiting Hubble Space Telescope. In conclusion, the contributions of Edwin Hubble in astronomy helped us to take a step further in physics especially Astrophysics. All of his discoveries are considered to be a key role in understanding the language of the universe in which we live and wish to perceive the contents of its vastness.

References:

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