Assignment example

Science, Physics



Answers to questions Question B) According to Hubble's research, a star has more redshift the farther away it is from the sun. His assumption was that the fainter a galaxy (farther away from the sun), the faster it is moving away from the milky way.

Question 2.

The Shapely-Curtis debate of 1920 was about the size of the universe. Shapely argued that the Milky way was the whole universe. Curtley was of the opinion that distant and smaller nebulae were actually independent galaxies.

Shapely's first argument was based on the Andromeda. According to him, if the Andromeda was an independent galaxy, then it would have to be at a distance of one trillion light years away, something that most scientists at the time agreed was impossible.

His second argument was based on and backed by observations made by fellow astronomer, Adriaan van Maanen. Van Maanen claimed to have observed he Pinwheel Galaxy rotate. For this to be possible, it would mean that it was revolving at a speed faster than the speed of light, which was impossible.

Question 3

Andrew Mackellar was unfortunate to lose the prize. He made his discovery at a time that World War II was at its peak. All efforts were towards winning the war and there wasn't an opportunity for him to present his findings to fellow scientists at a conference.