

Doppler effect with light waves

09 February 2021

14:51

- If an observer is looking at a star which is emitting light,
- If the star recedes away (moves away) from the observer, the f_o (of light waves) will be less than the actual freq. of light emitted by the star.
• Since lower freq. of light is towards the "RED END" of the spectrum hence this effect is known as "Red Shift"
- Reverse :: Star is moving Towards the observer;
 $f_o >$ actual freq. of light emitted by the star.
• Since higher frequencies are closer towards the "VIOLET/BLUE END" of the spectrum hence this effect is known as "Blue Shift".

Mega Lecture