



A Level Physics Online

Edexcel Physics – 9PH0

Module 10: Space

You should be able to demonstrate and show your understanding of:	Progress and understanding:			
	1	2	3	4
Space				
How to use the equation: $I = \frac{L}{4\pi d^2}$ <i>(L = luminosity, d = distance from source)</i>				
How astronomical distances can be determined using trigonometric parallax				
How astronomical distance can be determined using measurements of intensity received from standard candles , which are objects of known luminosity				
Hertzprung-Russell diagrams (which relates stellar luminosity to surface temperature) and how to sketch / interpret them				
How the movement of a source of waves that are relative to an observer can give rise to a shift in their frequency, or display the Doppler effect				
The equations for redshift: $z = \frac{\Delta\lambda}{\lambda} \approx \frac{\Delta f}{f} \approx \frac{v}{c}$ for a source of electromagnetic radiation moving relative to an observer, as well as: $v = H_0 d$ for objects at cosmological distances				
the controversy over the age and ultimatum of the universe associated with the value of the Hubble constant and possible existence of dark matter .				

