

Virtual Astronomy Lab Ex. 21

Radial Motions of Stars

Do any five stars. The number of a star is given in the lower right when you click on one of its spectral lines in its spectrum. The star numbering changes for a different session of the program.

Star #	True or Rest Wavelength(nm), λ_{rest}	Measured WL(nm) λ_{meas}	Doppler Shift, $\Delta\lambda$	Fractional Doppler Shift, $\Delta\lambda/\lambda_{rest}$	Radial Velocity (km/sec)

Doppler Shift, $\Delta\lambda = \lambda_{meas} - \lambda_{rest}$

Radial Velocity, $V_R = [\Delta\lambda/\lambda_{rest}]c$

$c = 3 \times 10^5$ km/sec