

Answer on question #55242,Physics / Astronomy — Astrophysics

Question What is the difference between kilometers, AU, light-years and parsecs? Which measure or measures is/are best for describing distances to stars and why?

Solution AU is average distance between Earth and Sun and is equal to $150 \cdot 10^6$ km.

Light year is distance that light will travel in one year and is equal to $9.46 \cdot 10^{12}$ km.

Parsec is distance at which one astronomical unit subtends an angle of one arcsecond and is equal to $31 \cdot 10^{12}$ km.

The best for describing distances to stars are parsecs, because they are the biggest and they are related to measurement of parallax angle.

<http://www.AssignmentExpert.com/>