

Stretching Space

Modeling an expanding universe

To do and notice:

Using a balloon or rubber band, mark 2 dots about one inch apart. Measure this distance.

Blow the balloon up or stretch the rubber band.

Measure the new distance.

What happened to the distance between the dots?

What's going on?

Each dot is representing a star or cluster of stars. Space is expanding, causing the stars (dots) to get further apart even though they aren't actually moving through space!

LIGO Connection:

LIGO is looking at items far away in outer space. They are so far away because space itself has expanded.