Optical Spectrum of a Galaxy

Recession velocity = 14387 km / s
z = 0.0479

[O III]  Hβ  Hα
Redshifted Spectra

Doppler Effect: Police Siren
Edwin Hubble
The Original Hubble Law
Modern-Day Hubble Law

Today our best value for the Hubble constant is 70 +/- 5 km / s / Mpc.
Balloon Analogy
Raisin-Bread Analogy
Measuring the Ages of the Oldest Objects in the Universe

The age of the Universe is thought to be 13.7 Gyr.

The oldest globular clusters are about 12.6 Gyr old.

So things seem consistent!