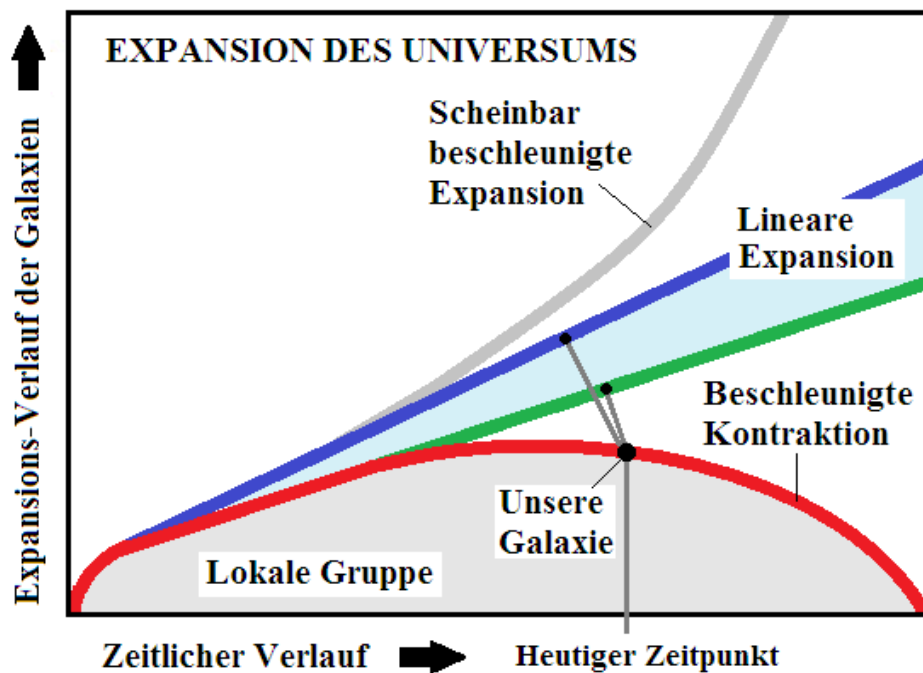


## The dark energy - an optical delusion?

It is often asked if the universe continues to expand, whether it eventually comes to a standstill or if it collapses. We observe that the more distant galaxies are moving faster and faster and the galaxies of the Local Group are moving towards each other. If we assume that about 70% of the galaxies are moving away from us and the remaining 30% are the local group, we get the following representation:



If we observe that the galaxies of the Local Group move more or less rapidly towards each other, then we can conclude that the vanishing 70% of the galaxies are moving away at a uniform speed - the farthest, of course, also the fastest. However, as we move back to a central point with our galaxy, we must subtract this speed from the speed of the vanishing galaxies. Only a positive result could then appear as dark energy.

As we move in our galaxy in the same direction as the galaxies moving away from us, the dark energy appears very small and barely recognizable. Only when our movement within our galaxy reverses and points in the opposite direction, we perceive the dark energy in the first place.

However, the observed accelerated expansion (dark energy) is actually the accelerated contraction we experience in our Local Group.

There are also the different interpretations of the redshift in the light, which are described in my book. The conclusion: **the dark energy is an optical delusion!** My book recommendation: **Die Masse erzeugende Wirbel-String-Gravitation** (The mass generating vortex-string-gravity).