

Addendum 1 to [HR-Geometry-of-the-Universe-20190206T1201Z.pdf](#)

Henk Reints, MSc.  
2019-02-08

1. In the introduction I mentioned the 3-ellipsoid and the 3-torus as possibilities for the geometry of the universe and then I explained why it can only be a s-sphere. Further argumentation thereof is as follows. An ellipsoid has several axes (like a normal ellipse has a major and a minor one) and their end points would be special locations in the universe. This would violate the homogeneity that follows from the Cosmological Principle. And a 3-torus might have several different *radii of curvature*, to which the same applies.
2. In the **Object intensity** paragraph, next image appears.

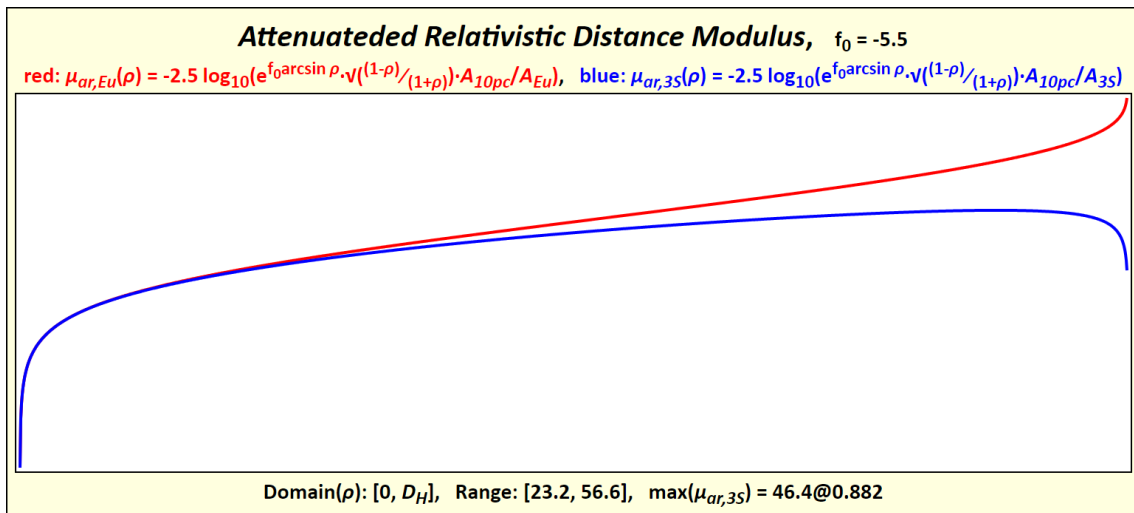
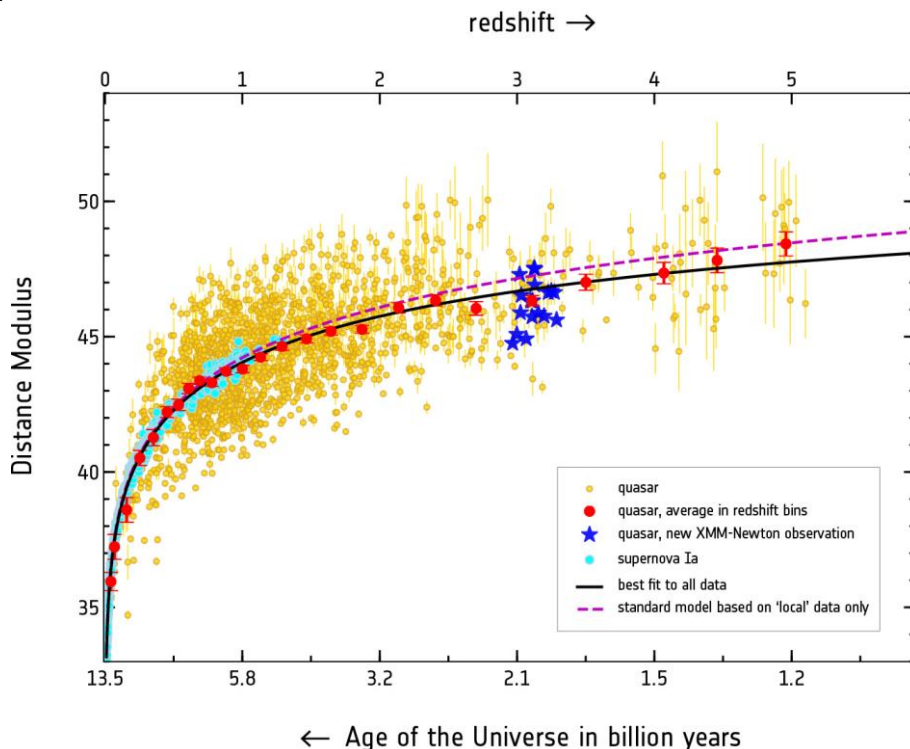


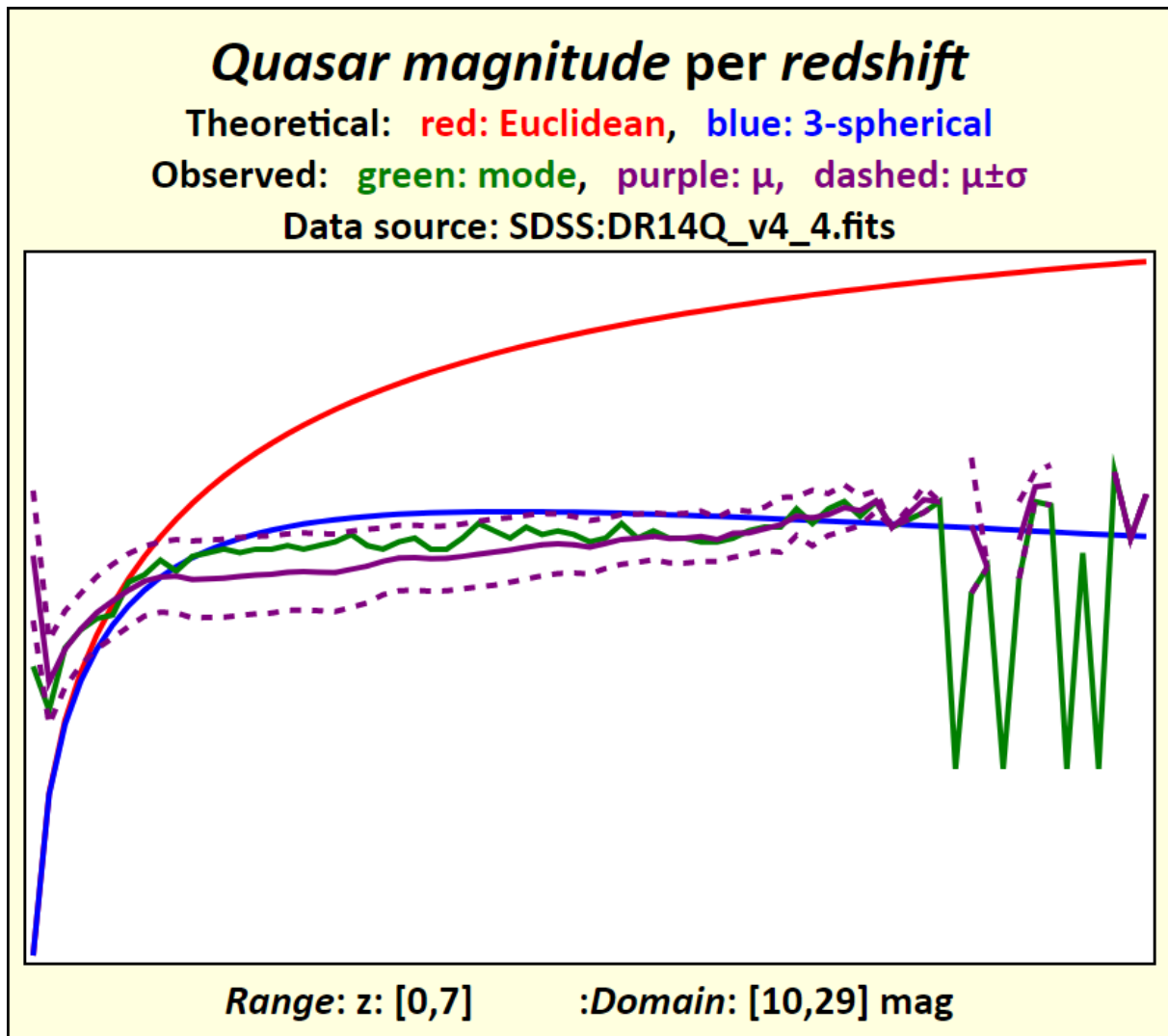
Fig. 18: Distance modulus for both geometries

Please compare this to next image by G. Risaliti & E. Lusso. Difference is the horizontal axis (above it's *distance*, below it's *redshift*).



[http://www.esa.int/Our Activities/Space Science/Active galaxies point to new physics of cosmic expansion.](http://www.esa.int/Our_Activities/Space_Science/Active_galaxies_point_to_new_physics_of_cosmic_expansion)

I also made a graph of the *magnitude - redshift* relations, see below.



**I'll eat my hat if this isn't convincing evidence that the universe is 3-spherical!**

**THE UNIVERSE IS A PERFECTLY LINEARLY EXPANDING 3-SPHERE.  
 Ex observatis phænomenis immediate deductum est.**

*It has directly been deduced from observed phenomena.*

*Hypothesefes non fingo, I do not feign hypotheses.*