Review of: "A simple direct empirical observation of systematic bias of the redshift as a distance indicator"

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Potential competing interests: No potential competing interests to declare.

Comments/suggestions to the author

I have reviewed thoroughly the manuscript entitled
"A simple direct empirical observation of systematic bias of the redshift as a distance indicator"
by Lior Shamir.

The paper has used the sample of spiral galaxies from 20 deg x 20 deg North and South Galactic poles to show the effect of rotation on redshift measurement. The author claims that the rotation of the galaxy with respect to the Milky Way rotation affects its redshift measurement and presents three samples from the North Galactic pole and one sample from the South Galactic pole in the support. The author also discusses that the H_{0} tension in CMB measurement and Ia SNe measurement is possibly the effect of inaccurate redshift measurement of galaxies. Indeed, the topic is quite interesting to understand the effect of rotation on the distance measurement, if at all exists.

However, I think that the results could be biased by several factors, such as the peculiar velocity of the galaxies, the small sample size, and the redshift distribution of the sample. Also, the effect of Doppler shift is not expected when galaxies are quite face-on. Therefore, I will suggest the author to examine the results with the following tests:

(1) After removing low redshift galaxies with $z < 0.005$, which are primarily affected by the peculiar velocities.

(2) Showing the redshift distribution of CW and CCW samples to confirm that the uncertainties in the mean are not affected by outliers in the samples. The difference in the median could also be tested.

A few minor corrections:

(1) In section 2, the arcsec in 5.5'' can be corrected.

(2) In Figure 3, the sample is shown up to 40 deg; however, the text describes only 20 deg x 20 deg field.

(3) Along with the t-test, the KS-test can also be tried for consistency.