SHORT:

SOME IMPORTANT DIFFERENCES BETWEEN XPXP AND λCDM

M.D. Earl 2023

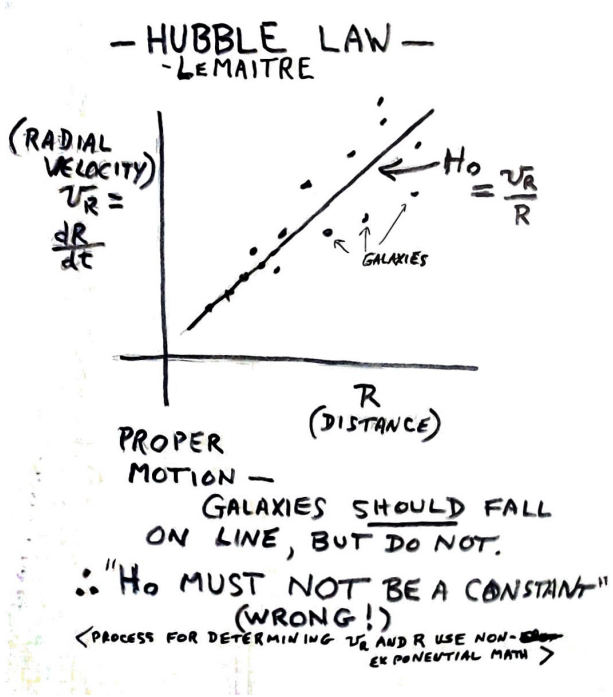
IMPORTANT CORRECTIONS TO STANDARD MODEL

	STANDARD MODEL	*	*EXPONENTIAL EXPANSION*
Light Speed:	$Constant$	*	$2HoRo\,e^{2Ho\triangle t}$
Distance:	$C\,\Delta t$	*	$Ro(e^{Ho\triangle t}-1)$
Wavelength Defined	λo	*	$Ro(e^{HoT[period]}-1)$
Doppler Shift	$\lambda' = \lambda o \sqrt{\frac{1}{1-\frac{v^2}{c^2}}}$	*	$\lambda' = \lambda o e^{Ho\triangle t[time\ of\ flight]}$

Other relationships: $T[period] = {}^{1}\!/_{\upsilon[frequency]}$

$\lambda\,\upsilon \approx c_0 \qquad \lambda\,\upsilon \neq c_0$

Figure 1.



In Figure 1., distance to a galaxy is determined by standard candle or other methods and velocity of the galaxy is found using relativistic Doppler shift.

When the velocity vs. distance diagram, comprised of many galaxies, was plotted, it was found that the data did not fall in a straight line Ho, as the Hubble-Lemaitre Law predicts. The standard model could justify this discrepancy only if Ho was not a true constant. Ho was demoted to a "parameter", and was said to have a current value, but a different different value earlier in the history of the universe. This permitted Ho to be consistent in the standard model.

To date, no one has doubted the measurements for distance and velocity of the standard model. It is proposed herein that the math, based upon the original inertial math of Lorentz (The "Great Mistake"), is the root cause of the discrepancy in Figure 1. Rather than a variable Ho, Ho is eternally constant in the exponential universe. Therefore the galaxies will lie on the line of direct proportionality (Ho) on an XPXP Velocity vs. Distance diagram.