

**Mini Review Article**

# Decreasing Universe: Redshifts and Distance Data Refute the L-CDM Model

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## Abstract

*To evaluate and compare the "Decreasing Universe theory" with the LCDM model, I created a potentially falsifiable prediction and the data was extracted and analyzed.*

**Keywords:** Decreasing Universe, L CDM, Redshift, Expansion of the Universe, Galaxies, Hubble

## 1. Introduction

In contrast to the L-CDM (Lambda Cold Dark Matter) model, which posits that more massive galaxies exhibit higher redshifts due to "Gravitational redshift". The "Decreasing Universe" theory suggests a different mechanism. While it acknowledges that photons lose energy escaping a galaxy's gravity, it also proposes that the galaxy itself contracts over time because of its gravitational field. This contraction leads to a decrease in the photon's wavelength, effectively increasing its energy. As a result, in this model, more massive galaxies would display smaller redshifts.

massive galaxies consistently have lower redshifts would support the "Decreasing Universe" theory and challenge the L-CDM model. Conversely, if more massive galaxies are observed to have higher redshifts, it would corroborate the L-CDM model and refute the "Decreasing Universe" hypothesis.

This prediction provides a clear observational test to distinguish between the two models, offering a pathway to validate or falsify the proposed theory. Decreasing Universe: At the same distance Larger mass smaller redshift.

### 1.1. To Evaluate and Compare my Theory with the L-CDM Model i have Devised a Potential Falsifiable Prediction

#### 1.1.1. Prediction

For galaxies at the same luminal distance, the "Decreasing Universe" theory predicts that more massive galaxies will exhibit lower redshifts on average. In contrast, the L-CDM model suggests that more massive galaxies should have higher redshifts due to the energy loss of photons escaping their gravitational fields.

#### 1.1.2. Implications

Observational data showing that, at a given distance, more

### 1.2. The Following type of Query was Used in Deep Seek to Obtain the Data

Could you provide me with 10 pairs of galaxies, each pair with the same approximate distance, but whose distances have not been measured using redshift, and all with redshift greater than 0.01? (Could you also include the approximate mass and redshift?) [1,2].

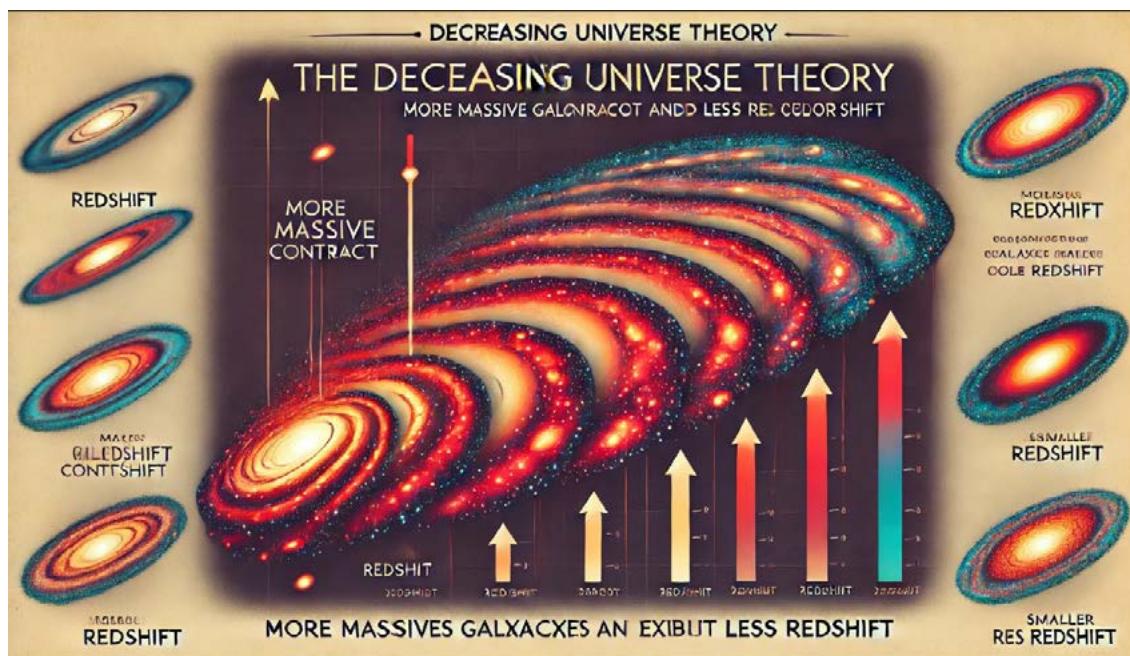
## 2. Conclusion

- Statistics: 47/50 = 94% of the galaxy pair fits the condition.
- At the same distance, larger mass has smaller redshift. Refuting the LCDM model.

N	Galaxy 1	Dist.1 (10^6 LY)	Mass.1 (10^10 MS)	Redshift 1	Galaxy 2	Dist.2 (10^6 LY)	Mass.2 (10^10MS)	Redshift 2	If Ok
1	NGC 4889	300	200	0.0216	NGC 4874	300	100	0.0239	Y
2	NGC 3842	320	100	0.0210	NGC 3837	320	50	0.0225	Y
3	NGC 4881	300	50	0.0220	NGC 4876	300	30	0.0230	Y
4	NGC 4839	310	80	0.0240	NGC 4840	310	40	0.0235	N
5	NGC 4921	320	60	0.0230	NGC 4911	320	50	0.0228	N
6	NGC 4782	200	30	0.0130	NGC 4783	200	20	0.0135	Y
7	NGC 5419	150	100	0.0140	NGC 5422	150	50	0.0145	Y
8	NGC 541	220	30	0.0180	NGC 545	220	20	0.0185	Y

9	NGC 5410	200	10	0.0150	NGC 5414	200	8	0.0155	Y
10	NGC 5426	120	5	0.0120	NGC 5427	120	6	0.0125	N
11	NGC 5506	100	2	0.0105	NGC 5507	100	1	0.0108	Y
12	NGC 5514	150	30	0.0140	NGC 5515	150	20	0.0145	Y
13	NGC 5525	200	10	0.0150	NGC 5527	200	8	0.0155	Y
14	NGC 5532	250	20	0.0180	NGC 5533	250	10	0.0185	Y
15	NGC 5544	150	5	0.0120	NGC 5545	150	4	0.0125	Y
16	NGC 5557	120	10	0.0105	NGC 5560	120	5	0.0110	Y
17	NGC 5576	100	3	0.0100	NGC 5577	100	2	0.0105	Y
18	NGC 5584	80	1	0.0102	NGC 5585	80	0.5	0.0105	Y
19	NGC 5595	150	2	0.0120	NGC 5597	150	1	0.0125	Y
20	NGC 5614	200	30	0.0150	NGC 5615	200	20	0.0155	Y
21	NGC 5638	80	2	0.0100	NGC 5636	80	1	0.0105	Y
22	NGC 5643	60	3	0.0110	NGC 5645	60	2	0.0115	Y
23	NGC 5653	150	4	0.0120	NGC 5654	150	3	0.0125	Y
24	NGC 5668	100	2	0.0105	NGC 5669	100	1	0.0110	Y
25	NGC 5676	120	3	0.0110	NGC 5678	120	2	0.0115	Y
26	NGC 5690	90	2	0.0100	NGC 5691	90	1	0.0105	Y
27	NGC 5701	80	3	0.0105	NGC 5705	80	2	0.0110	Y
28	NGC 5713	100	4	0.0110	NGC 5719	100	3	0.0115	Y
29	NGC 5746	90	3	0.0105	NGC 5740	90	2	0.0110	Y
30	NGC 5746	90	3	0.0105	NGC 5740	90	2	0.0110	Y
31	NGC 5750	120	4	0.0110	NGC 5754	120	3	0.0115	Y
32	NGC 5775	80	3	0.0100	NGC 5774	80	2	0.0105	Y
33	NGC 5792	150	5	0.0120	NGC 5793	150	4	0.0125	Y
34	NGC 5806	90	3	0.0105	NGC 5813	90	2	0.0110	Y
35	NGC 5831	100	4	0.0110	NGC 5832	100	3	0.0115	Y
36	NGC 5846	120	5	0.0120	NGC 5845	120	4	0.0125	Y
37	NGC 5850	130	6	0.0130	NGC 5854	130	5	0.0135	Y
38	NGC 5866	50	2	0.0100	NGC 5869	50	1	0.0105	Y
39	NGC 5879	80	3	0.0105	NGC 5885	80	2	0.0110	Y
40	NGC 5897	100	4	0.0110	NGC 5898	100	3	0.0115	Y
41	NGC 5907	50	2	0.0100	NGC 5905	50	1	0.0105	Y
42	NGC 5921	80	3	0.0105	NGC 5925	80	2	0.0110	Y
43	NGC 5930	120	4	0.0110	NGC 5935	120	3	0.0115	Y
44	NGC 5949	100	3	0.0105	NGC 5953	100	2	0.0110	Y
45	NGC 5962	90	4	0.0110	NGC 5963	90	3	0.0115	Y
46	NGC 5970	120	5	0.0120	NGC 5975	120	4	0.0125	Y
47	NGC 5982	130	6	0.0130	NGC 5985	130	5	0.0135	Y
48	NGC 5987	100	4	0.0110	NGC 5989	100	3	0.0115	Y
49	NGC 5990	150	5	0.0120	NGC 5992	150	4	0.0125	Y
50	NGC 6000	120	4	0.0110	NGC 6001	120	3	0.0115	Y

**Decreasing Universe: At the Same Distance Larger Mass Smaller Redshift**



## References

1. Barcellos, J. Decreasing Universe: The Distance as a function of Redshift.
2. de Barcellos, J. C. H. (2019). Derivation of Hubble's Law and the End of the Dark Elements. Open Access Library Journal, 6(4), 1-10.