

Galaxy Name	Halo Mass [$10^{12}M_{\odot}$]	Disk Mass [$10^{12}M_{\odot}$]	Bulge Mass [$10^{12}M_{\odot}$]	Total Mass [$10^{12}M_{\odot}$]	f_{bar}
MW	1.975	0.075	0.01	2.06	0.041
M31	1.921	0.12	0.019	2.06	0.067
M33	0.187	0.009	N/A	0.196	0.046

Total Mass of the Local Group [$10^{12}M_{\odot}$]: 4.316

f_{bar} of the Local Group: 0.054

1. Total Mass of MW vs M31: Ratio of 1.0. Halo Mass dominates.

2. Stellar Mass of MW vs M31: Ratio of 0.612. As M31 contains more stellar mass, which is the only type of mass that directly contributes to the luminosity of a galaxy, we expect it to be more luminous.

3. Dark Matter Content of MW vs M31: Ratio of 1.0. Yes - despite the stark difference in stellar matter, they have almost exactly the same dark matter content!

4. Baryonic Fraction f_{bar} for each galaxy is MW:0.041, M31:0.067, M33:0.046. Our baryonic fractions are universally lower than the provided value of 16%. MW:0.25625, M31:0.41875, M33:0.2875. This discrepancy might come down to [TODO!]