

Introductory Astronomy

Week 7: Galaxies

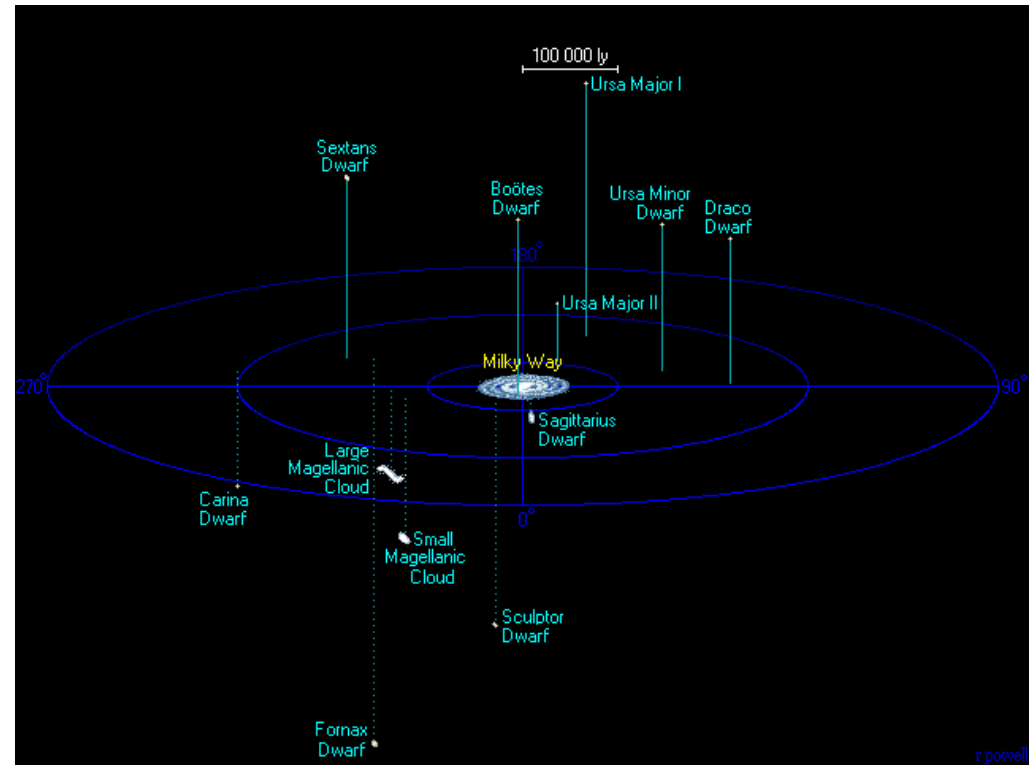
Clip 6: Halo and Neighbors

Halo

- 150 globular clusters and field stars
- 40% in retrograde orbits
- Most within 50kpc
- 99% of mass in field stars
- Warm (10^{4-5} K) gas in halo
- Observed through absorption
- *2012: Hot (10^6 K) gas halo extends 100kpc and may contain $6 \times 10^{10} M_{\odot}$

Satellites

- Several dwarf galaxies and Magellanic Clouds? Orbit Milky Way
- Some breaking up due to tidal forces and merging



Neighbors



Credits

- MW Satellites: R. Powell
<http://www.atlasoftheuniverse.com/sattelit.html>
- Magellanic Clouds: Courtesy Australian Astronomical Observatory, photograph by David Malin
<http://www.aao.gov.au/images/captions/misc021.html>
- Leo I Dwarf: : Courtesy Australian Astronomical Observatory, photograph by David Malin
<http://www.aao.gov.au/images/captions/aat051.html>