April 2, 2019 MSE 2103 topics

- Center of the Universe through time
- Hubble's law revisited
- Two ways to make that happen
- Doppler shifts vs. cosmological redshifts
- Implication from both scenarios: time has a beginning!
- The Hubble constant and why it's not really a constant
- Hubble time and its connection to the Hubble "constant"
- The cosmological principle:
 - $^{\circ}$ universality
 - ° isotropy
 - homogeneity
- Clearly we need a universe without an edge. But how?
- De Sitter's stretching of wavelengths
- The inflating balloon analogy
- The Big Bang