March 28, 2019 MSE 2103 topics

- The Shapley-Curtis Debate on Apr 26, 1920
- Resolution: Edwin Hubble's discovery of Cepheids in M33
- Affirmation: Cepheids in M31 and Barnard's galaxy
- But ... shouldn't galaxies hurl towards each other?
- That said ... shouldn't stars hurl towards each other?
- But of course: infinite universe!
- Yet ... why is the sky dark at night then?
- The statement of Olbers' paradox
- Proposed solutions:
 - perhaps the universe is *young* and *infinite*?
 - stars are not uniformly distributed?
 - how about obscuring dust?
 - perhaps the number of stars and galaxies is sufficiently low?
- The actual solution of the Olbers' paradox
- But ... but ... but ... why isn't stuff hurling in then?
- Slipher's and Hubble's receding galaxies