February 5, 2019 MSE 2103 topics

- Eddington's model (from Einstein's mass-energy equivalence)
- The proton-proton chain: collision → weak decay → heating → capture → replay → final collision
- Issues with the model
- Kinetic theory of gases, quantum tunneling to the rescue!
- So how long before the Sun burns out?
- Looking up to other stars ... but uberlarge distances!!!
 o are brightnesses intrinsic, extrinsic or both?
- How would *you* measure a distance to a star?
- Trigonometric parallaxes
- Apparent magnitudes and absolute magnitudes
 you covered apparent magnitudes in Lab B, remember?