October 7, 2019 MSE 2101 topics

- The greenhouse effect: basic idea
 - Average temperature on a planet surface distance and ...?
 - The sources: vibrations, rotations, fluorescence
 - ∘ Greenhouse gases: CO₂, H₂O, CH₄
 - ∘ CO2 on Earth vs. Venus:
 - 1:200,000 in the atmosphere
 - 170,000:1 in the rocks
 - \circ The carbon dioxide cycle: rainfall \rightarrow erosion \rightarrow deposits \rightarrow subduction \rightarrow melting \rightarrow outgassing \rightarrow dissolving
- Atmosphere longevity
 - solar wind stripping
 - impacts and collisions
 - thermal escape
- The source of magnetic field revisited
 - electrically conducting fluid/gas
 - convection in such a layer
 - moderately rapid rotation
- Carbon dioxide cycle