## **INTRODUCTION TO ASTROPHYSICS**

- Quantities per-unit-mass
- 1<sup>st</sup> law of thermodynamics revisited
- Heat content of a spherical shell inside the star
- 3<sup>rd</sup> equation of stellar structure
  hydrostatic equilibrium form
- Global thermodynamical equilibrium (GTE)
- Mean free path
- Local thermodynamical equilibrium (LTE)
- Major consequence: stellar interiors are nearly perfect blackbody radiators!