

Arras meeting

- Skim chapter one
- Equation of state
- Torque that changes spin
 - Gravitational tides in ocean
 - Time dependent thermal tides → observations in earth's atmosphere
 - Can excite different waves in earth's atmosphere
- Goals
 - Initialize atmosphere
 - Writing in own function heating the gas
 - For gas in domain → write short section, change thermal energy of gas based on heat, total volume per time
 - Rotating planet with radiation on one side of planet
 - Star will grab onto densities and grab onto quadrupole moments
 - Simulate spa
 - thermtide.cpp
 - Athinput files → gm, pressure at base, density at base, rotation rate
- Find heating and cooling
 - User defined physical source term
- $Q = \text{energy per volume} \times \text{time} = -\text{Coeff}(\text{Temp} - \text{background temp}(r, \theta, \phi, \text{time}))$