

$$R_{\text{Sirius B}} = 5500 \text{ km}$$

Pressure $\xleftrightarrow{\text{balance}}$ self-gravitation

"real volume"
 $dx dy dz$
 $= d^3 r$

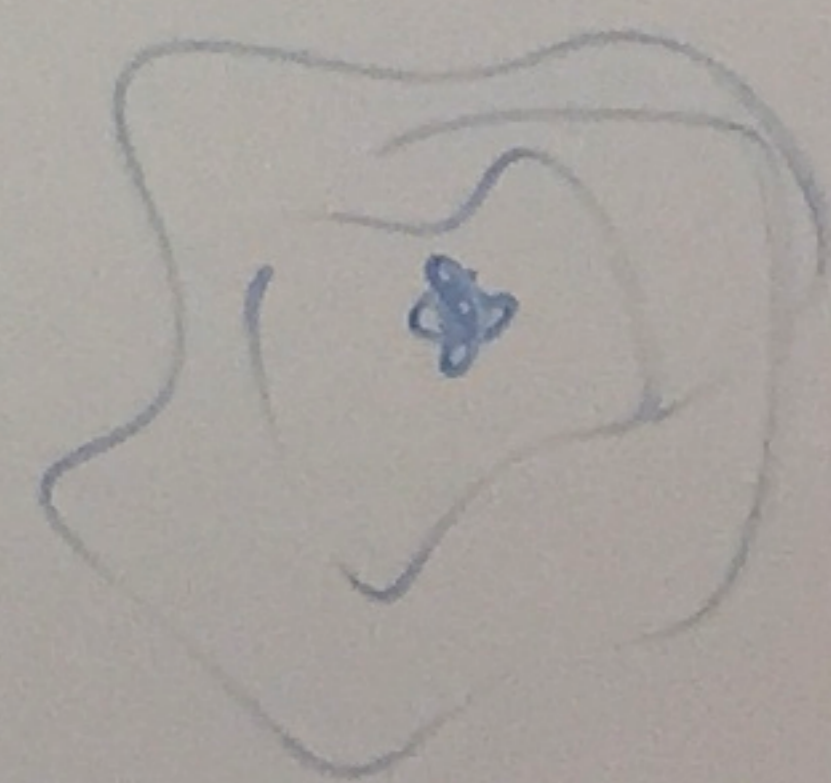
~~$P = \frac{n}{m_H} \cdot RT$? (Ideal Gas Law)~~

~~Radiation Pressure ?~~

Momentum
Space
Volume
 $dp_x dp_y dp_z$
 $= d^3 p$

Fermi Pressure!

Ordinary solid:



White Dwarf



Pauli Principle

Fermions

2 or more identical particles

cannot occupy the same Quantum State

Fermions = Spin $\frac{\hbar}{2}, \frac{3}{2}\hbar, \frac{5}{2}\hbar, \dots$ Ex.: Electron

Qv. States \uparrow, \downarrow

\rightarrow all of chemistry