



## Navier flow driven levitation of water molecules through the force of gravity and light

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### Abstract

The molecules were migrating on the earth to space on the cloud. If one can compare the size of molecules for their distance and distance travelled time is practically infinite. But then in reality the water molecules are displacing earth to cloud and then pouring this saturated water droplets certain order of molecular dimension. In this context we are going to study the vaporization of water molecules through the interaction of light and gravity through the help of mathematical apparatus.

**Keywords:** Navier, Gravity

### Discussion

#### 1. Light interaction of water molecules

Light is the fundamental force of nature and this forces were hold the entire materials objects in the universe. And light is the driving force of molecules to making the dynamical character of nature. The dynamic characteristics of molecules decide the nature of the transition and transformation in the space.

If the water molecules are interacted with the light for suitable vibration frequencies and then if they will get start the vibration then that was equivalent to the selective frequency of vibration of the light. The two hydrogen atom size was very small therefore this will oscillate very fast up

and down through higher density to lower density of state in the space. Here the water molecules all are passing through the air medium higher density of liquid to lower density air. Here, one of the important phase transition to happening liquid to gaseous state of transformations. The volume expansion is the one of the factor to making the water molecular flow on the cloud.

Then we have to do condensation of water molecules for assembly of gas atoms in molecules then and will do necessarily the small correction for this the Boyles law for the purpose of change in state and transformation of matter.

$$PV=KT$$

$$V_1 = \frac{KT}{P}$$

$$PV = \frac{hv}{e^{KT-1}} (N_e + N_p)$$

Electron (e) and proton (p) is the electron and proton these two particles are consider as the main character to making the transition of state in matter.

$$\frac{P}{\frac{hv}{e^{KT-1}}} = \frac{(N_e + N_p)}{V}$$

$$\text{Then, } V = \frac{(N_e + N_p)}{\frac{P}{\frac{hv}{e^{KT-1}}}}$$

$$V = \frac{(N_e + N_p)}{\frac{P e^{KT-1}}{hv}}$$

$$V_2 = \frac{(N_e + N_p)}{P e^{KT-1}} hv$$

The transition of liquid to gaseous molecule is,

$$V_2 - V_1 = \left( \frac{(N_e + N_p)}{P e^{KT-1}} hv - \frac{KT}{P} \right)$$

Volume expansion of the liquid is take into accounted by the only the expansion of hydrogen molecules within the water.

$$dV = \frac{dS}{dP} dT$$

$$dV = \left( \frac{(N_e + N_p)}{P} e^{\frac{h\nu}{KT}} - 1 \right) hv - \frac{KT}{P}$$

$$\frac{dS}{dP} dT = \left( \frac{(N_e + N_p)}{P} e^{\frac{h\nu}{KT}} - 1 \right) hv - \frac{KT}{P}$$

$$\frac{P}{dP} dT = \left( \frac{(N_e + N_p)}{e^{\frac{h\nu}{KT}} - 1} hv - KT \right)$$

$$\frac{P}{dP} dT dS = \left( \frac{N_h\nu}{e^{\frac{h\nu}{KT}} - 1} - KT \right)$$

$$\frac{P}{dP} dT dS = \left( \frac{\frac{N_h\nu}{KT}}{e^{\frac{h\nu}{KT}} - 1} - 1 \right)$$

$$\left( \frac{\frac{N_h\nu}{KT}}{e^{\frac{h\nu}{KT}} - 1} - 1 \right) dT dS = \frac{dP}{P}$$

Then integrate both sides T and P only,

$$\left( \frac{\frac{N_h\nu}{KT}}{e^{\frac{h\nu}{KT}} - 1} - 1 \right)^{-1} T dS = \log P$$

$$\log P = T dS \left( \frac{\frac{N_h\nu}{KT}}{e^{\frac{h\nu}{KT}} - 1} - 1 \right)^{-1}$$

$$P = dQ e^{\left( \frac{\frac{N_h\nu}{KT}}{e^{\frac{h\nu}{KT}} - 1} - 1 \right)^{-1}}$$

Liquid to gas and gas to liquid transition of particles density of state is

$\rho(E) = e^{\left(\frac{N\hbar\nu}{KT} - 1\right)^{-1}} V(dQ)$ . similarly we can write the solid state of density of state of energy or assembly of matter in the space is,

$$\rho(E) = e^{\left(\frac{N\hbar\nu}{KT} + 1\right)^{-1}} V(dQ) \dots \dots \dots (1)$$

Here the rate of heat is the one of the parameters to induce the vaporization of water molecules in the space on the cloud.

**2. Gravity interaction of water molecules**

Gravity is not constant for every where therefore the force of gradient it will make the contact with atom very weakly. The gravity lines of forces were passing through the straight line at infinite distance but the atomic forces all are point forces they never intersect one another therefore have not to form interaction of one another. This context we are going to study the electric force perforation through lines of gravity.

Then take for use straight line equation  $y=mx+c$  then additionally add the velocity  $v$ .

$y+v=mx+c$  after reduction of this  $c=v$ . This is to say the gravity lines of forces physically equivalent to the constant value. No need to take this all initial zero now going to take physically initial  $v$ . Here  $\frac{v}{c} = 1$ .  $v$ -is the velocity of electron flow. The atomic diffusion of gravity is  $x_1 = (c - v)t$  some times decide the nature of the other way  $x_2 = (c + v)t$ . The nature of the interaction of distance separation is  $r = \frac{1}{2}((c - v)t + (c + v)t)$ . The minute interaction of gravity and the atom of this force was  $\zeta(F)$ . The combined form of kinetic energy of the electronic forces and gravity  $r \zeta(F) = \frac{1}{2} \zeta(F) \cdot ((c - v)t + (c + v)t)$ .

Then introduce the wave function of electrons in form of De-Broglie wave momentum  $p = \frac{h}{\lambda}$ . Then convert energy in to the work  $\delta(w) = t \cdot r \zeta(F) = \frac{1}{2} p \cdot ((c - v)t + (c + v)t)$ .

$$\delta(w) = \frac{1}{2} p \cdot ((c - v)t + (c + v)t)$$

$$\delta(w) = \frac{h}{2\lambda} \cdot ((c-v)t + (c+v)t)$$

De-Broglie wave function of the gaseous molecule  $\lambda_{thermal} = \frac{h}{(2\pi m k T)^{1/2}}$

The work of water vapor and gravity is

$$\delta(w) = p dx$$

$$\delta(w) = \frac{h}{2 \frac{h}{(2\pi m k T)^{1/2}}} \cdot ((c-v)t + (c+v)t)$$

$$\delta(w) = \frac{(2\pi m k T)^{1/2}}{2} \cdot ((c-v)t + (c+v)t)$$

$$\delta(w) = \frac{(2\pi m k T)^{1/2}}{2} \cdot 2 \cdot ct$$

$$\delta(w_{gas}) = (2\pi m k T)^{1/2} \cdot ct$$

Then De-Broglie wave function of the elliptic orbit

$$\lambda = \frac{h c}{\left(\frac{1}{2} m r^2 + \frac{1}{2} m r^2 \dot{\theta}^2 + U(r)\right)}$$

The work function of the gravity force for their related matter interaction is

$$\delta(w) = \frac{h}{2 \frac{h c}{\left(\frac{1}{2} m r^2 + \frac{1}{2} m r^2 \dot{\theta}^2 + U(r)\right)}} \cdot ((c-v)t + (c+v)t)$$

$$\delta(w) = \frac{\left(\frac{1}{2} m r^2 + \frac{1}{2} m r^2 \dot{\theta}^2 + U(r)\right)}{2 c} \cdot ((c-v)t + (c+v)t)$$

$$\delta(w) = \frac{\left(\frac{1}{2} m r^2 + \frac{1}{2} m r^2 \dot{\theta}^2 + U(r)\right)}{2 c} \cdot c \left( \left(1 - \frac{v}{c}\right)t + \left(1 + \frac{v}{c}\right)t \right)$$

$$\delta(w) = \frac{\left(\frac{1}{2} m r^2 + \frac{1}{2} m r^2 \dot{\theta}^2 + U(r)\right)}{2 c} \cdot ct \left( \left(1 - \frac{v}{c}\right) + \left(1 + \frac{v}{c}\right) \right)$$

$$\delta(w) = \frac{\left(\frac{1}{2} m r^2 + \frac{1}{2} m r^2 \dot{\theta}^2 + U(r)\right)}{2} \cdot t \left( \left(1 - \frac{v}{c}\right) + \left(1 + \frac{v}{c}\right) \right)$$

$$\delta (w)=\frac{\left(\frac{1}{2}mr^2+\frac{1}{2}mr^2\dot{\theta}^2+U(r)\right)}{2} \cdot t\left(\left(1-\frac{v}{c}\right)+\left(1+\frac{v}{c}\right)\right)$$

$$\delta (w_{gravity})=\left(\frac{1}{2}m\dot{r}^2+\frac{1}{2}mr^2\dot{\theta}^2+U(r)\right)t$$

$$\delta (w_{gas}-w_{gravity})=\left((2\pi mKT)^{\frac{1}{2}} \cdot ct\right)-\left(\left(\frac{1}{2}m\dot{r}^2+\frac{1}{2}mr^2\dot{\theta}^2+U(r)\right)t\right)$$

$$\delta (w_{interact})=\left(c(2\pi mKT)^{\frac{1}{2}}-\frac{1}{2}m\dot{r}^2-\frac{1}{2}mr^2\dot{\theta}^2-U(r)\right)t$$

$$\frac{\delta (w_{interact})}{t}=\left(c(2\pi mKT)^{\frac{1}{2}}-\frac{1}{2}m\dot{r}^2-\frac{1}{2}mr^2\dot{\theta}^2-U(r)\right)$$

the change in energy of gas,

$$\delta (E)=\left(c(2\pi mKT)^{\frac{1}{2}}-\frac{1}{2}m\dot{r}^2-\frac{1}{2}mr^2\dot{\theta}^2-U(r)\right)$$

$$\delta (E)=\left(c(2\pi mKT)^{\frac{1}{2}}-\frac{1}{2}m\dot{r}^2-\frac{1}{2}mr^2\dot{\theta}^2-U(r)\right).....(2)$$

The combined form of (1) and (2) give the levitation of water molecules for in our earth.

$$\rho (E) \delta (E)=e^{\left(\frac{NkT}{eK^T-1}\right)^{-1}} V(dQ)\left(c(2\pi mKT)^{\frac{1}{2}}-\frac{1}{2}m\dot{r}^2-\frac{1}{2}mr^2\dot{\theta}^2-U(r)\right)$$

$$\rho (E) \delta (E)=$$

$$\left(c(2\pi mKT)^{\frac{1}{2}}e^{\left(\frac{NkT}{eK^T-1}\right)^{-1}} V(dQ)-\frac{1}{2}m\dot{r}^2e^{\left(\frac{NkT}{eK^T-1}\right)^{-1}} V(dQ)-\frac{1}{2}mr^2\dot{\theta}^2-U(r)e^{\left(\frac{NkT}{eK^T-1}\right)^{-1}} V(dQ)\right)$$

This is to give the relation of water molecule flow through the air medium on the cloud to the interaction of fundamental force of nature.

## Conclusion

The water molecules were transported via medium the help of two fundamental forces of nature one is light and other one gravity. The levitation of water molecules are verified the universal force of gravity and the interaction of water molecules mutually. The final result was indicating the path of the water molecules transformation in the space through the force of light and gravity.

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