Article title: The imaginary part thermodynamics chemistry: Imaginary part
Authors: ABDUL KAREEM ALELAIMAT[1]
Affiliations: alelaimat chemistry laboratory[1]
Orcid ids: 0009-0005-1450-698X[1]
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ScienceOpen Preprints for open peer review.
DOI: 10.14293/PR2199.000111.v1
Preprint first posted online: 10 May 2023
Keywords: Alelaimat Chemistry Laboratory institution, Mad professor, Alelaimat Chemistry, Imaginary part, Abdul
Kareem entropy, Thermodynamics chemistry of imaginary part
Mysterious imaginary part discovering by using water bubbles.

Abdul Kareem K. Alelaimat*

Abstract: This mysterious advantage of the study deals with the Imaginary part discovering of its mysterious puzzle, where it done to determine the nature of undefined part of the classical and quantum system in the dealing with the same characterization of the two mechanics, where the study show that the imaginary part controlled the nature of the classical mechanics with the quantum mechanics by the bounding between it as it described by the classical system and the quantized representative particles. The study depends on analysis method of the nature of micro canonical ensample as the analysis of the idealized water bubbles to make the system analysis as the thermodynamics laws say it. With the agreements with the thermodynamics analysis, it show that the imaginary part is actually dynamic depend on the factors make it imaginary and undefined but in fact it what defined in the nature. The results show that the imaginary part is the spiral operator inter to the system by the no dimensional acting as the radius of the spiral is the temperature ratio as the factors are determined and the eigenvalue of the operator is one which is non-active in the multiplications and the dimensions.

Keywords: imaginary part, water bubbles, Alelaimat operator, projectile entropy, fifth law of thermodynamics.

Introduction:

In this study I will determine the imaginary part nature of the classical system by using the micro canonical system which is defined as the isolated system all the events occur and found in it that used in the information entropy parameter of Boltzmann analysis, where it consist from isothermal nature to save the constant internal energy of the
system.\(^1\) and the thermodynamics chemistry analysis, the imaginary part play important roles in sciences in different types which include the magnetic fields as the magnetic lines of the magnetic force that represent the direction of the magnetic field as the movement from one pole of the field to the other pole in it and cannot be as a one pole only.\(^2\) when the magnetic field foundation in the system of the study around it. The magnetic line has the properties are considered here as magnetic field lines which is first property is that it goes from the north pole to south pole, inside the magnet, the direction of the magnetic field lines is the opposite than outside, second property that no any intersection at any point in its lines, and third property is the magnetic force lines form a closed-loop.\(^2\)

In the electric field it found as the reactance of the capacity and the induction method which it is a measure of voltage divided by resistance in specific components in the circuit, it occurs as the collisions of the electrons in different paths with the atoms inside the part is the resistor only.\(^3\) In more detail, the imaginary part in the electricity is defined as the reactance which is the part of the impedance in electricity, and it defined as the measurement parameter of the opposite that a part of a circuit presents to electric current as the current is varying or frequented.\(^4\)

In the other sciences it defined in the massive object as the imaginary top surface of the distilled water in the glass. The mass defined as the dimensionless quantity representing the amount of matter in a particle or object.\(^5\) when the object moves in high velocity it feel by the reduction in its mass, actually it only quantized particles in very amount lost and he is feeling by it lost a huge of its mass at the higher speed that reach to the speed of light. Imaginary mass is a strange and still only a theoretical concept used as that comes from taking the square root of a negative number as in mathematics in this
case, it means that a particle's mass with speeds greater than light, as for the normal speed the momentum making as this for that we are feeling by it.\(^{(6)}\)

The main appearance of the imaginary part was in the quadratic equation in the parabolic type as the equation below:

\[ y^2 + x = 0 \]

Where when we solve the equation will show that the answer is the square root of the negative value so we cannot define this quantity in math.

\[ y = \sqrt{-x} \]

The most active using is for the Schrödinger equation of the wave, where the imaginary part is a value represented the natural behaviors of the imaginary part represents the frequency (and also phase sometimes) of the wave. As it the complex exponential spiral represented the relativistic behaviors of the electrons motion in the orbital with the agreement with the uncertainty principle. The operator used the Euler exponential which is the complex exponential has the double opposite spiral as it represented the relativistic behaviors of the electrons.\(^{(7)}\)

This research studies done by using different methodologies are the theoritical analysis methodology, the observational methodology, the prototype methodology, and the experimental part methodology. The dissertation statement is "The space-time universe can not describe accurately by Newton and Einstein philosophy, and the base of the nature still mysterious and only as a scientific fiction."

**The experiments:**
Firstly, starting with the observations methods as it the first analysis and monitor of the imaginary part by using the fluid mechanics thermodynamics chemistry analysis and descriptions. These observations are for the water sample at boiling point and the car:

- The spiral formed at the bits changing in the factors of the pulse numbers, the thermal conductivity, and the volume of the bubbles.
- The bubbles flow untile it exploded by the thermal flow non-linear and the length of travelling of the bubbles.
- The imaginary part of the surface acting on the bits of the information of water to be as a bubbles.
- The reciprocal volume of the bubbles, the angular momentum of the bubbles formation, the radius of the bubbles, and the bubbles explosive.
- The adding of solutes have more magnetic permeability on the imaginary surface stratching.
- The light effects on the bubbles imaginations and become real part.
- The top of the bubbles as pointed area, and the axting of the bubbles rotations in clockwise or anti-clockwise directions.
- The two bubbles swining in the water surface, and the imaginary part converting to be real.
- The factor of the tempreture on the angular momentum and inertia, and the planks formed in the colorless media.

Secondly, for the prototypes making of the Alelaimat operator and the Abdul Kareem entropy:

- **Alelaimat operator:** by using the fluid mechanics modeling, the variables will be the thermal diffusivity, the wavelength, and the time.
- **Abdul Kareem entropy**: by using the fluid mechanics modeling, the variables will be the thermal conductivity, the magnetic permeability, the electric permittivity, the number of pulses, the equilibrium central point. The water bubbles formed by doublet bits of information, with the reduction of the microstates of it, the reference system is the equilibrium stable state and the reductions in the microstates, and for the interactions between bubbles in steric field using sound waves. The puzzle applied thermodynamics chemistry entropy type in the imaginary part converting to real part avoid the Boltzmann information entropy.

For the third part of the study which is the experimental part, the study will done to monitor the imaginary part and separating of it.

- Make a sample of boiling water then by using FTR-IR spectra analysis spectra determined the imaginary part of the bubbles, by determination of the rotations positions of the heat, then added radicals compounds and highly electric permittivity compounds that recorded to the water sample and determine the effects on the heat rotations positions, then make another analysis of the background of the spectra for the angular momentum of the bubbles and the sample before it boiled, then analysis it.

- Make sample of cold ice at very lower possible volume, then put it under highly sound waves, then reduce the magnetic permeability and electric permittivity of the sample, this is the possible imaginary part, then determine the accuracy of the imaginations. But at higher accuracy the sample under higher electric voltage with uniform electric field then after the time of heating separate the imaginations by the magnetic field at constant temperature then make the
spectra analysis to know its microstates, effectively it may be by the NMR spectra.

Results

In this part the results of the observations, prototyping, and experimetal parts set as:

1. **Observations results:**

   1. The spiral observed in the factors of the formations, an eigenvalue of the bits of information acting on the water sample making the spiral of information to making it as the resulted bit vibrations of imaginary part. The bit of information result from the eigenvalue of the specialist bit of information related to the time arrow. Where in the dimensions of the microstate, the angular momentum acting on the temperature and two identical time arrow dimensions appear the displacement as the microstates stored in the information itself. So the space time of the matter stored in the matter itself, mean alternative path to find frequent sets of the bubbles without candidate generations and improving the bubbles performance, and the space time is the acting of the events on the another and the space and time are relativistic, and the bit operator is a one which is absolute number in the multiplication save the significant figure of the initial original bits.

   2. The non-linearity and length of bubbles, the information of the water become increase by operator has exponential growth effects of the imaginary part, depend in this imaginations on the length of the water sample. So the imaginary spiral proportional directly to the sound waves wavelength. And inversely to the electric permittivity, magnetic
permeability, volume, pulse duration, thermal conductivity. The imaginary operator has the width of the speed and error combination where the errors are the thermal variations and non-linear heat flow as it in the bubbles spiral and in the causing of the bubble to expulsion.

3. The angular momentum and reciprocal volume of the bubbles, the water surface resistance appear to be separated during the bubbles angular momentum lost its radius to be linear momentum, this conversion lead to make the craks tranfere the magnetic permuability in the surface and pentrate to make the events in the reciprocal volume. In the rotation water sample by the rood to make the small whirlpools. This width decrease by the speed of the rod of motions and with the errors of combinations between the particles which are the non-linear heat flow and thermal variations, which caused the bubbles to explosion. The factor of complex number when it multiplied by itself give the rotation direction by anti-clockwise direction that stored the propability and the momentum inside the imaginary folding of the bubbles at rigid constant points surrounding it and make the events dancing and troubled in it. As it insulating and very poor conducting of spin and caused di-direction of motion.

4. The stratching of imaginations, the adding of the materials has high magnetic permeability in water solution the membrane of the water bubbles become more scratched, and make the transfere the bits between the space more active, that also caused more attracting for the eyes to monitor it by the magnetic field effects of pulling and directions of the information and it will be imaginary attractive. The space time cracking
occur for the imaginary pressure and angular momentum transfere the sound waves to get the new kinetic mechanism improving the same events.

5. The light and reality, water bubbles as it still to be more real by troubled the surface imaginary cover to be more active for the light lead to exploded, then it will transfere the projectiled particles to acting on the water samples causing the reality things. The projectile entropy found in the water bubbles explosive make the imaginary surface act as the real parts, the first imaginary state work has no useful real state work can make it real.

6. The pointed area and rotations, the imaginary surface of the bubble appear and there is a pointed area in the bottom of it as the opposite of the drop, that casing pulling in the drops. As the water set under the pulses it causing the rotation in anti-clockwise direction. The magnetic permeability surrounding the surface in imagination can be determined by the attracting of it for the eyes in depth monitoring and cause the shift in the symetrical line of the bubbles, and make scratching of the bubbles surface to be real part.

7. The two bubbles swinging and the imaginations converting, the di bits occur by the symmetry of the center of water lead to make two bubbles swimming in the opposite sides make the entropy in the centrr to be set as real and dansing, and make the splitting of the potential of the water to make the spiral operator. These two bubbles make in opposite dircetions to make the line of symetry applied on the center causing the
explosive and make the entropy of the imaginary parts. The entropy proportional directly to the square of the bits in the imaginary entropy.

8. The planks and temperture, I was in the car and faced angular momentum caused thr inertia of the events to be useful controlled by me but I can not, in another trail I acting this rotational angular momentum on the temperture of me, and I faced that I can controlled by the feeling of something of plank have an ability to do anything I need to make. Which mean this is the storage place and the microstates number of the events to be occur and stored the thermodynamics propability ratio of the events in the dimenssions of angular momentum and temperture. This appear as the factor of thr entropy but it stored by in the bits which canceled its dimenssions.

2. The prototyping results:

1. For Alelaimat operator:

The water bubbles formed rapidly by sound waves, in exponential growth of something in the length, the reference system is the magnetic field, electrical field, and the other variables. In addition to that, the interactions between the bubbles make by the Boltzmann constant, and the temperature ratio and the same variables repeated to interactions. The puzzle applied thermodynamics chemistry laws in second and third where it equalised. Then the variables still in the trajectories to still repeated and separated the medium.

- The wavelength and pentration depth controlled the events changinging as it stored in it. As it the thermal diffusivity in the wavenumber.
• The events changing occupied by the state of infinite universes as the imaginary spinor.

• The water sample can be divided imaginary and theoretically to the magnetic spiral has the top of the electric permittivity in each circle and occupied by thermal diffusivity of the heat energy when it boiling.

• The bubbles of water in its boiling acting as the circular number of periods with the effects of the speed of light.

• The bubbles occupied by the factor lead to folded the bits without the changing in it and its an imaginary field surface.

2. For Abdul Kareem entropy:

• information entropy acting over the information entropy of the water itself, that make the cracks in water.

• where the pressure of the surrounding water make the heat capacity at constant pressure and make the temperature difference that will make the pulse duration.

• for the information lead to make the cracks these are thermal conductivity, volume of the mass, factor of water gain to collect, water become more troubled, angular number of the oxygen losing.

• And this will be represented in the first bubble that will be surrounded by the imaginary field as the lost of the particles from the base of water.

3. The experiments results:

• The events folding:

<table>
<thead>
<tr>
<th>The tempreature (°C)</th>
<th>The wavelength (meter)</th>
<th>The volume</th>
<th>The thermal diffusivity</th>
<th>The time duration</th>
</tr>
</thead>
</table>

The calculations of the imaginary part for each state depend on the theoretical equation setting:

By using this law calculate (i): \[ i = \left( \frac{\lambda c^2}{\mu e} \frac{K_1}{V} \right) = \left( \lambda c^2 * \frac{k}{\lambda t} + \frac{1}{V} \right) \]

By using the information above calculate the imaginary bubbles formation by the equation from the theoretical studies which is:

\[ b = t\sqrt{1/Dl} \]

And calculate the entropy from the equation is:

\[ dS = K_B \left[ \ln \left( \frac{\Omega_2^{\frac{1}{\Omega_1}}} {\Omega_1^{\frac{1}{\Omega_2}}} \right) \right]^2 \]

Table of calculations:

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>Imaginary part</th>
<th>Imaginary bubbles</th>
<th>Imaginary entropy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1.668*10^{18}</td>
<td>0.715*10^6</td>
<td>1.854*10^{72}</td>
</tr>
<tr>
<td>25</td>
<td>9.732*10^6</td>
<td>0.1369*10^6</td>
<td>60</td>
</tr>
<tr>
<td>50</td>
<td>8.978*10^6</td>
<td>0.1542*10^6</td>
<td>60</td>
</tr>
<tr>
<td>75</td>
<td>8.333*10^6</td>
<td>0.1619*10^6</td>
<td>60</td>
</tr>
<tr>
<td>100</td>
<td>7.775*10^6</td>
<td>20*10^6</td>
<td>60</td>
</tr>
</tbody>
</table>
Where the imaginary part will be taken in the hyper universe square root of negative half for Ziad hyper universe, and the entropy will be taken as the isobaric entropy where it the same for the information entropy. This entropy it’s the same as the water boiling bubbles sounds. There is imaginary world and life but under the universe of imaginary part, the mysterious of Ziad hyper universe will be dangerous.

To discuss these results getting from the studies used the parts of the studies of the imaginary parts which are the imaginary part operator and the imaginary entropy. Lets go!

1. Imaginary part function and kinetic chemistry.

The imaginary part is a part of the actual universe where the other part is the real part and it determined by the multiplication of the imaginary unit and has no specific analysis for it. The theories of the imaginary part function and kinetic chemistry are:

- If the nuclear space in reality equilibrium with the second space, and the second space with reality equilibrium with the third space, so the nuclear space with imaginary equilibrium with the third space.
- The imaginary space is the time space has the zero entropy and highly active entropy on the real space.
- As the heat energy rotate around the quantum particles in isochoric angular momentum the entropy whole will be appear to be imagine.

<table>
<thead>
<tr>
<th>25</th>
<th>1.589*10^{18}</th>
<th>0.866*10^6</th>
<th>24.585*10^{72}</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>1.301*10^{18}</td>
<td>0.85*10^6</td>
<td>2.170*10^{72}</td>
</tr>
<tr>
<td>75</td>
<td>1.150*10^{18}</td>
<td>0.861*10^6</td>
<td>2.050*10^{72}</td>
</tr>
<tr>
<td>100</td>
<td>0.008*10^{18}</td>
<td>0.0802*10^6</td>
<td>9.069*10^{65}</td>
</tr>
</tbody>
</table>
The function and kinetic analysis of the object in imaginary part is begin by the description of the imaginary part, so what is the description of the imaginary part?

Firstly, what is the imaginary unit? It’s the number stored in the memory space of the upper universe as the heat information will be leave lead to make a distribution and lead to make spectral shift in the black background for there is no energy in it active in it. As we can see this as the lower temperature give peaks shifted at lower wavelengths, so for the black space that will be make a state of vibration but there is no any wavelength appear in fact which lead to ise another concept that will written in the sections as the (imaginary volumes) this will be lead to increase the entropy of information as the work of shifting has no useful energy in the absence of the wavelength in the background and lead to make it as the entropy in losing in the back this is the imagine definition where this will be imagine as no useful energy to be real in fact of the state of it so the body still controlled by it to be the imaginary part.

The good representation of the events is by using the circle represented the micro canonical ensemble system of the events, where it represented the data in effectively communicating data to uniformed readers in the spinor of the object to be read the events in it that divided into series of pieces save the events in it represented by algorithmic scale to the base of the exponential as the third law depend on it where we can determined from it that the events change in a minimum energy required for it. According to the object analysis in the past section we can see that the spring has only one microstate number available, by taken the first mass highly changing in the kinetic energy at constant temperature of it to the typing of the rearrangements in the circle proportional to the kinetic energy at specific temperature. So this lead to determine that the circle has an angular momentum with a direction appear to the circle, the torque of
the circle motion of the sets can be explanted the non-equilibrium states rearrangement also because the external force of the imaginary states circle represented by the spring force on it which can be determined by the pushing of the piston and the events will be change.

As the object by this non-equilibrium state will be inversely acting on the circle to emitted the sound waves frequencies of the spring in elastic form, where these vibrations expressed in the classical mechanics as the space in which all the possible microstates found, this circle will be connected with the motion of the angular momentum reader of the events to be the spiral form where the radiuses will be changed with the angle of rotations. The spiral form has significant are:

- Decomposed the gravity force to two directions are the perpendicular direction to its surface which keep the angular momentum direction of the events and the tangent direction which save the events to be change during it still in the circle
- Consists from different layers of the circles has different radius which help to divided it to the different positions to take its events.
- Each orbital of the layers has a specific kinetic energy must be carried by the particles has specific temperature to get it its events.
- Keep the events have non-linear representation in its work.
- Keep the laws of thermodynamics as it defined as fundamental studied of it.
- Keep the entropy as the work has no useful energy and as the energy has no useful work as from the two definition when it equalized the time will be appearing for the events.

Effect of the decomposition of the components to perpendicular is to counter balanced by the normal force and the other is to keep the object moving in a circle at the velocity
with the space of the travel time, and it keep the time constant for the mass at specific point to keep the time in specific orbitals increase as the enthalpy decrease. And for the layers it keeps different total probabilities of the events at constant velocity of the time in the space and give different energies can have carried by the layers as the bottom of the layer carried the zero-point energy at zero vibration quantum number can be detected easily. The other points save the thermodynamic laws of the events as it defined so it must be taken to marker this analysis. Finally, for the entropy it must be taken to represented the events changing to be transfer the events between the actual and real parts of the reality as it as the energy has no useful work, as the keeping of the entropies as constant in the same energy level and by using the constant ratios between the radiuses of the components circle as a finding the events as the doors between worlds.

The other properties that give the spiral shape of the events circle are:

- The energy of rotational motion has the minimum energy required than the other forms.
- The first law of thermodynamic of the energy flow kept during the information transferring as it gets what is lost and lost what is get so it will be conserved.
- Keep the zeroth law of thermodynamics for the equilibrium state of the object components to be in equilibrium even it in isolated system.
- Make the angular momentum by the subject applied force very easily to be permutable through it.
- The center of the equilibrium of the object connected with a specific point in the poles of the object to get it a specific equilibrium of the events Follow th theory of orthogonal group but it will change the signals of it after applied a rotation.
For the equilibrium state of the events where the events will be go to the future as it can be growth which is the definition of the future or it will be disappear as it goes to the past so the micro canonical ensemble can be represented by two spirals has different directions and as it shows in the figure below. And finally for the imaginary unit magnitude in the kinetic chemistry it is the square root of the angular momentum direction as it will be described by the spiral shape where it will be the space-time operator for the real and imaginary worlds.

1. **The imaginary part spiral operator.**

According to the zeroth law of thermodynamics, the system must behave in the imaginary part as another particle as representative particle has the same events and kinetics by the effects of the angular momentum of the corn, so the object in the classical system and the representative particle in equilibrium, and as the action will be in the maximum entropy of the events. And the object must have lost its temperature to avoiding the heat depth of the events by the free energy acting by the rotations of its equilibrium state center, this is by the temperature fluctuations that lead to accelerated and formed the sound waves emissions of the particles in the minimum energy level of rotation as the idealized study give that. And this sound waves can be represented that the matter makes the penetrations in the other worlds to get their events by isentropic process, and based on the first law must be found the operator that transfer the actions to the imaginary part has dimensionless factor and affected by the acting over the bit so the equation and the definition of the spiral operator can be designed below as:

The object increasing rapidly with nonlinear increasing in the rate changing of the events converting, where there are no dimensions of the populations and rapidly changing in it.
\[ S = K \ln(\Omega) \]
\[ S2 - S1 = K \ln \left( \frac{\Omega2}{\Omega1} \right) = KdB \]
\[ \ln \left( \frac{\Omega2}{\Omega1} \right) = dB = \frac{dq}{Ek} \]
\[ \frac{v^2}{e^{pT}} = \frac{dq}{Ek} \]
\[ \Omega2 = \Omega1 e^{(\frac{dq}{mpv})} \]

The acting of the exponential changing is by the constant factor acting over the time determined the key of the events which is for the rigid object it the frozen constant angular momentum.

The events will be occurring by the acting of the heat energy of the particles represented the object on this angular momentum caused the oxidation state of the angular momentum and lead to formed the velocity of the events.

\[ \Omega2 = \Omega1 e^{tv} \]

This velocity is the velocity of the sound waves appear from the objects and behave as the controlled factor of the penetration depth.

\[ D = \frac{1}{\sqrt{\pi \mu \varepsilon \bar{f}}} \]
\[ D^2 = \frac{1}{\pi \mu \bar{f} \varepsilon} \]
\[ v = \frac{\lambda}{\pi \mu D^2 \varepsilon} \]
This penetration depth will be used for the sound waves that penetrate the heat not itself, so it’s the thermal penetration of the sound waves.

\[ D^2 = d \times t \]
\[ D^2 = \frac{k}{c} \times t \]
\[ f\lambda = \frac{\lambda C}{\pi \mu \kappa \varepsilon} = v \]

This thermal penetration will be used the concept of the entropy where the energy of the events has no useful work to do it and changing the events series inside the object, but as the reversible and at minimum energy level this entropy become the information entropy. Where the heat entropy occurs at the isobaric entropy to save the internal energy of the events

\[ dS = mC_p \ln \left( \frac{T_2}{T_1} \right) \]

Lead to acting of the thermal penetration of the spiral to act as the thermal diffusivity building the space of the bubbles then the heat capacity to make the temperature of the bubble to increase its heat energy to be moved as the entropy of the energy has no useful work to do it. But when the t faced the volume surrounding it, the surrounding has a condition is at the isobaric state which lead to make this energy of heat act as the entropy where it only make the distribution of the temperature that lead by its acting to make the temperature driving force that lead to flow of the entropy in it.

\[ f\lambda = \frac{\lambda dS}{\pi \mu \kappa \varepsilon \ln \left( \frac{T_2}{T_1} \right)} = v \]

However, the entropy that formed it is at the reversible adiabatic state where there is no heat flow as the energy become as the entropy but it is also at the minimum level of
energy that convert the entropy to be also as the work has no useful energy which is the work that need to build the imaginary surface of the bubbles

\[ \Omega_2 = \Omega_1 e^{(\lambda E_k \ln \left( \frac{T_2}{T_1} \right) - \frac{\mu \pi \varepsilon_\kappa V}{\kappa \ln \left( \frac{T_2}{T_1} \right)}} \]

The events equation will be appearing by the spiral non dimensional factor as the multiplication operator entering to the events and lead to convert the pit by the nature of the multiplication operator.

This will be stored the events inside the bubbles and make the bubbles as the bits of the events changing ratio, which will be remove it by the factor of the information entropy appear after diffusivity to make only the flux without acting of the entropy that make only the path and still as only the factor of the path function.

\[ \ln \left( \frac{\Omega_2}{\Omega_1} \right) = \frac{\lambda E_k \ln \left( \frac{\Omega_2}{\Omega_1} \right)}{\mu \pi \varepsilon_\kappa V + \ln \left( \frac{T_2}{T_1} \right)} \]

\[ \frac{T_2}{T_1} e^{\left( \frac{\lambda \kappa}{\mu \pi \varepsilon_\kappa V} \right)} = 1 \]

The spiral that formed has a length of the temperature ratio which is will be defined hear as the mirage of the dimension's penetration by the process appear and it filled the blacks of the water sample between its crystals that give the sample the specific temperature of boiling. And the number of the circles get the time of the process, where the circle width gets the time motion velocity in the space flow of the bubbles and the spiral and it act as the high between each circles which is the dimensions from a onetime to another time which is the imaginary part.
\[
\frac{T_2}{T_1} e^{\left(\frac{\lambda}{\mu \pi \varepsilon} \frac{K}{\kappa t} \frac{1}{V}\right)} = 1
\]

- The definition of Alelaimat operator is:

\[
\xi = \frac{T_2}{T_1} e^{\left(\frac{\lambda}{\mu \pi \varepsilon} \frac{K}{\kappa t} \frac{1}{V}\right)}
\]

\[
\xi d\text{bit} = d\text{bit}
\]

"The dimensionless operator acting over the information stored of the representative particles in the imaginary part by dimensionless radius of temperature convection ratio and the spiral direction of the unit of the reciprocal volume, to get the object totally events with total probability in the real part and formed its events"

The significant of Alelaimat operator is by the intersection of the dimensionless factor in the bits changing in the imaginary part and no anything to measure exactly in the real part, and to determine the space-time curvature which is the direction dimension of the spiral in the imaginary part of the object acting by it to get it the specific bit changing during the mechanism of the events formation. Which give another definition of the space-time curvature not as Einstein says in the relativity theories which here more accurate that his theories.

The classical mechanics show that the operator can be easily to be applied in it naturally, suppose that the mass in the classical mechanics can be characterized by the magnetic permeability and electric permittivity we can consider the new definition of the wave shadow where it the image formed by the reflection of the wavelength applied on the mass has higher electric permittivity and higher magnetic permeability which it has the wavy manner of it is the pulse duration velocity acting of the particles kinetic energy at specific temperature on the penetration depth with the direction out of the paper which
is the definition of the wave flux. By these two definitions we can set the imaginary part as the "wavy shadow"

The imaginary part is the wavy shadow at higher electric permittivity and magnetic permeability has wavy kinetic behaviors has reciprocal space dimension. The equation of it is:

\[ \xi = \frac{T_2}{T_1} e^{ti} \]

\[ i = \frac{1}{t} \ln \left( \frac{T_1}{T_2} \right) \xi \]

The imaginary part base on the definition is the velocity of normal data set of Alelaimat operator kinetically by the acting over the operator by the reciprocal temperature driving force.

### 2. The entropy of the imaginary part:

Something appear that the bubbles need to build its surface but it may be expulsion or convert to another bubbles that is mean that there is entropy deigned as the imaginary part cannot convert to the real part.

By this entropy we can defined the time according to the first law and zeroth law with agreement with the nature of the space-time curvature and deals with the second law of thermodynamic of the time as it described by the time raw entropy theory to specified the entropy of the object. Where the entropy of information as Boltzmann said will be has some of no useful manners in the definitions of the entropy of the space-time, and this depend on the space-time information process.

According to the equation of:
\[ \Omega_2 = \Omega_1 e^{\frac{\lambda}{\mu \pi \epsilon \kappa \ln \left( \frac{T_2}{T_1} \right)^k}} \]

\[ \ln(\Omega_2 / \Omega_1) = \frac{\lambda dS}{\mu \pi \epsilon V t \ln \left( \frac{T_2}{T_1} \right)} \]

Where \( t \) is the pulse duration and equal to the \( t = h/c \) where \( h \) is the distance of the pulses and the \( c \) is the speed of light. So:

\[ \ln(\Omega_2 / \Omega_1) = \frac{-2a(mCp)dS_1}{2\pi f \kappa \mu \epsilon dS_2} \]

Where the second entropy is for the information and the equation show that,

\[ K_B (\ln(\Omega_2 / \Omega_1))^2 = \frac{-2a(mCp)dS_1}{\omega \kappa \mu \epsilon} \]

So the entropy of information resulted from the converting of the energy has no useful work will be as the equation below. Where it taken for the state as revisable adiabatic at minimum energy that has its acting as the imaginary entropy or projectile entropy.

\[ dS = K_B \left[ \ln \left( \frac{\Omega_2}{\Omega_1} \right) \right]^2 \]

\[ dS = K_B \left[ \ln \left( \frac{\Omega_2}{\Omega_1} \right) \sqrt{\omega \kappa \mu \epsilon} \right]^2 \]

\[ dS = K_B \left[ \ln \left( \frac{\Omega_2}{\Omega_1} \right) \sqrt{\frac{N_0}{\epsilon \mu \kappa \mu \epsilon}} \right]^2 \]

\[ dS = K_B \left[ \ln \left( \frac{\Omega_2}{\Omega_1} \right) \sqrt{\frac{T}{T_1}} \right]^2 \]
Where KB is the Boltzmann constant, $\Omega$ is the events, $\bar{N}$ is the number of circles, $V$ is the volume, $\mu$ is the magnetic permeability, $\varepsilon$ is the electric permittivity, $\sqrt{-0.5}$ is the equilibrium stability. So the entropy of the imaginary part is as it shows in the equation above for the events changing in reversible process at minimum energy level and this entropy defined as "the pulse reversible work transfer to energy in the space-time of information".

To explain this entropy suppose that the changing in the events of the pendulum occur under the changing of the thermal diffusivity, the motion of the pendulum in the blank make the thermal diffusivity make the imaginary crack in the wavenumber, lead to penetrate the data to the subject which stored the information number in the events changing ratio with respect to the time lead to make the microstate of the imaginations which are the bubbles foldings. This imagination will be the place of the imaginary spinor of the wavenumber penetrations lead to make the reality. The imaginary part which is the spinor is the set of infinit universes applied the same states changing of the information which mean that the space attack by the arallel universes controlled the information that get to our planets.

We can have investigated here the fifth law of thermodynamics which is the first law in thermodynamics imaginary part which is:

"The entropy of the events still increasing in the space-time, as the half spin acting as the projectile energy for the events"

Where the law can be explained by the projectile motion as the driving force of the vibrating sound waves of the events heat penetration, where the projectile motion can be described the state of the events and determined in another section.

Conclusion:
The imaginary part play important roles in the study of the nature of the thermodynamics chemistry system, where in this study I focus on the water bubbles as the example of the study as it shows that the imaginary part is a one of the major roots of the thermodynamics and other physical system nature in chemistry. The study was very important adventure finished by the fifth law of thermodynamics which is very important law in it determine the nature of the systems in the imaginations. As the conclusion statement is the imaginary part is a fact reaction.

Acknowledgment

Holy pure thanks for my family as they supporting me and believe by my abilities to help me in my studies and the imaginations as especially for my father, and I thank my organization (Alelaimat Chemistry Laboratory) which help me in the folding of the studies under its name. As I thanks my friends of H2O group.

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