Modifying Schrodinger's equation with respect to the squeeze theorem: countering Heisenberg's uncertainty

Abstract :

Comparative evaluation of the probability by the Schrodinger equation for the traditional form and using numbers that respect the limit theorem of x tending to zero when sine of x = x showing that complex zeta numbers of misiec that respect the aforementioned theorem allow identification by discharge probability of subatomic particle placement and that it is likely that for given masses and frequencies the probability remains the same and dependent on the frequency expressions per sine of x expressed in terms of equivalent complex zeta numbers.

Introduction:

It follows a simple derviation of the Schrodinger´s equation with the subsequente modification of 2Pi allowed by the fact that the numbers zeta complex of misiec respect the squeeze theorem where the limit of x of the sinx/x =1.

$e^{ix} = \cos x + i \sin x$ and $\varphi(x,t) = e^{i(kx-\omega t)}$

$p = \frac{h}{\lambda} \rightarrow \lambda = \frac{h}{p}$

X$x \rightarrow x + \lambda$

$e^{ik\lambda} \rightarrow e^{i\pi} = -1 \quad and\ e^{2\pi i} = 1$

$\kappa * \lambda = 2\pi \rightarrow \lambda = \frac{2\pi}{\kappa} \rightarrow \frac{2\pi}{k} = \frac{h}{p} \rightarrow p = \frac{hk}{2\pi}$

$$\hbar = \frac{h}{2\pi} \to p = \frac{hk}{2\pi} \to p = \hbar k$$

But if I consider x tending to zero then $\lim_{x\to 0} \frac{\sin x}{x} = sinx = x$ so e^{ix} =cos x+ ix = 1 that allows for the substitution of 2Pi for the expression. of cos x +x when sin x = x whcih is na atribute of the misiec´s zeta complex numbers given by mi=$\frac{1}{n*n^{\left(\frac{1}{2}+n*n*i\right)}}$ that has the atribute emprically proven to behave as if sin x = x.

$$E = h\,\nu \;\; and\; t \to t + \frac{1}{\nu} \to wt = \frac{w}{\nu} + wt \to \; \frac{w}{\nu} = 2\pi \; so\; e^{\frac{iw}{\nu}} = e^{i2\pi} = 1$$

$$\nu = \frac{w}{2\pi} \to E = h\nu = \frac{hw}{2\pi} = \; \hbar w$$

Again 2Pi can be equaly substituted for cos x + i x for whcih x will be “mi”.

All of this substitution implies that $\hbar \neq \frac{h}{2Pi}$ $and\ will\ be\ given\ as\ \hbar 1 =$ h/cos x +ix where x= mi.

This will give a final schrodinger´s equation with a subtitution for $\hbar\ by\ \hbar 1$.

Bellow it follows the usual derivation of the schrodinger´s equation.

$$KE = \frac{1mv^2}{2} = \frac{p^2}{2m} \to \frac{(\hbar k)^2}{2m}$$

$$\varphi(x,t) = e^{i(kx-\omega t)}$$

$$\frac{\partial\varphi}{\partial x} = ik\,\varphi(x,t)$$

$$\frac{\partial^2\varphi}{\partial^2 x^2} = (ik)^2\varphi(x,t) = -k^2\,\varphi(x,t)$$

$$\frac{-\hbar^2}{2m}\frac{\partial^2\varphi}{\partial x^2} = \frac{(\hbar k)^2}{2m}\,\varphi(x,t)$$

$$\frac{\partial\varphi}{\partial t} = -iw\ \varphi(x,t)$$

$$+i\ \hbar\frac{\partial\varphi}{\partial t} = \hbar w\ \varphi(x,t)$$

$i\hbar\frac{\partial\varphi}{\partial t} = \frac{-\hbar^2}{2m}\frac{\partial^2\varphi}{\partial x^2}$ => $i\hbar 1\frac{\partial\varphi}{\partial t} = \frac{-\hbar 1^2}{2m}\frac{\partial^2\varphi}{\partial x^2}$

```
h1=6.6*10^-34
sq=Table[j,{j,1000}]
n=Select[sq,PrimeQ,(100)]
m=9.109*10^-31
l=10^-10
x=Select[sq,PrimeQ,(100)]
n1=Cos[1/n*n^(1/2+n*n*Sqrt[-1])]+Sqrt[-1]*Sin[1/n*n^(1/2+n*n*Sqrt[-1])]
h=h1/n1
k1=n1/l
k=2*Pi/l
a=(h^2*k1^2/(2*m))
h2=h1/2*Pi
b=(h2^2*k^2/(2*m))
d=ReIm[a]
e=ReIm[b]
ListLinePlot[d]
ListLinePlot[e]
Plot[a,{a,0,100}]
Plot[b,{b,0,100}]
```

$$i\hbar 1\frac{\partial\varphi}{\partial t} = \frac{-\hbar 1^2}{2m}\frac{\partial^2\varphi}{\partial x^2}$$

$2.391041826764738\times 10^{-17} + 7.703719777548944\times 10^{-34}i, 2.391041826764738\times 10^{-17} - 6.162975822039155\times 10^{-33}i, 2.391041826764738\times 10^{-17} - 1.540743955509788\times 10^{-33}i, 2.391041826764738\times 10^{-17} + 1.540743955509788\times 10^{-33}i, 2.391041826764738\times 10^{-17} + 7.703719777548944\times 10^{-34}i, 2.391041826764737\times 10^{-17} + 0.i, 2.391041826764737\times 10^{-17} + 0.i, 2.391041826764737\times 10^{-17} - 1.540743955509788\times 10^{-33}i, 2.391041826764738\times 10^{-17} + 1.540743955509788\times$

$10^{-33}i,2.391041826764738 \times 10^{-17} + 3.851859888774472 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 3.851859888774472 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} - 1.444447458290427 \times$
$10^{-34}i,2.391041826764737 \times 10^{-17} + 3.081487911019577 \times$
$10^{-33}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764738 \times$
$10^{-17} - 1.540743955509788 \times 10^{-33}i,2.391041826764738 \times$
$10^{-17} + 0.\,i,2.391041826764738 \times 10^{-17} + 7.703719777548944 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 1.540743955509788 \times$
$10^{-33}i,2.391041826764739 \times 10^{-17} - 7.703719777548944 \times$
$10^{-34}i,2.391041826764736 \times 10^{-17} - 1.540743955509788 \times$
$10^{-33}i,2.391041826764737 \times 10^{-17} + 7.703719777548944 \times$
$10^{-34}i,2.391041826764737 \times 10^{-17} - 7.703719777548944 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 7.703719777548944 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764738 \times$
$10^{-17} + 0.\,i,2.391041826764738 \times 10^{-17} +$
$0.\,i,2.391041826764737 \times 10^{-17} - 7.703719777548944 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} - 3.851859888774472 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764737 \times$
$10^{-17} + 0.\,i,2.391041826764737 \times 10^{-17} +$
$0.\,i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764738 \times$
$10^{-17} + 3.851859888774472 \times 10^{-34}i,2.391041826764737 \times$
$10^{-17} + 3.851859888774472 \times 10^{-34}i,2.391041826764738 \times$
$10^{-17} + 0.\,i,2.391041826764739 \times 10^{-17} +$
$0.\,i,2.391041826764737 \times 10^{-17} + 1.925929944387236 \times$
$10^{-34}i,2.391041826764737 \times 10^{-17} + 0.\,i,2.391041826764738 \times$
$10^{-17} + 0.\,i,2.391041826764737 \times 10^{-17} - 7.703719777548944 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 1.540743955509788 \times$
$10^{-33}i,2.391041826764737 \times 10^{-17} + 0.\,i,2.391041826764737 \times$
$10^{-17} + 7.703719777548944 \times 10^{-34}i,2.391041826764737 \times$
$10^{-17} + 0.\,i,2.391041826764738 \times 10^{-17} +$
$0.\,i,2.391041826764738 \times 10^{-17} + 3.851859888774472 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} - 3.851859888774472 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 5.777789833161708 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764737 \times$
$10^{-17} - 3.851859888774472 \times 10^{-34}i,2.391041826764737 \times$
$10^{-17} - 3.851859888774472 \times 10^{-34}i,2.391041826764738 \times$
$10^{-17} + 0.\,i,2.391041826764738 \times 10^{-17} - 1.925929944387236 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} - 1.925929944387236 \times$
$10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764738 \times$

$10^{-17} + 0.\,i,2.391041826764738 \times 10^{-17} +$

$0.\,i,2.391041826764738 \times 10^{-17} + 3.851859888774472 \times$

$10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764738 \times$

$10^{-17} + 0.\,i,2.391041826764738 \times 10^{-17} + 3.851859888774472 \times$

$10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764738 \times$

$10^{-17} - 3.851859888774472 \times 10^{-34}i,2.391041826764738 \times$

$10^{-17} - 2.888894916580854 \times 10^{-34}i,2.391041826764737 \times$

$10^{-17} + 2.407412430484045 \times 10^{-35}i,2.391041826764738 \times$

$10^{-17} - 3.851859888774472 \times 10^{-34}i,2.391041826764738 \times$

$10^{-17} + 0.\,i,2.391041826764737 \times 10^{-17} +$

$0.\,i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764738 \times$

$10^{-17} + 0.\,i,2.391041826764737 \times 10^{-17} +$

$0.\,i,2.391041826764739 \times 10^{-17} + 0.\,i,2.391041826764737 \times$

$10^{-17} + 0.\,i,2.391041826764739 \times 10^{-17} +$

$0.\,i,2.391041826764738 \times 10^{-17} + 3.851859888774472 \times$

$10^{-34}i,2.391041826764738 \times 10^{-17} + 3.851859888774472 \times$

$10^{-34}i,2.391041826764737 \times 10^{-17} + 4.81482486096809 \times$

$10^{-35}i,2.391041826764737 \times 10^{-17} - 3.851859888774472 \times$

$10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764738 \times$

$10^{-17} + 4.81482486096809 \times 10^{-35}i,2.391041826764738 \times 10^{-17} +$

$3.851859888774472 \times 10^{-34}i,2.391041826764738 \times 10^{-17} +$

$1.925929944387236 \times 10^{-34}i,2.391041826764737 \times 10^{-17} -$

$1.925929944387236 \times 10^{-34}i,2.391041826764736 \times 10^{-17} -$

$3.851859888774472 \times 10^{-34}i,2.391041826764737 \times 10^{-17} -$

$1.925929944387236 \times 10^{-34}i,2.391041826764738 \times 10^{-17} -$

$3.851859888774472 \times 10^{-34}i,2.391041826764738 \times 10^{-17} -$

$9.62964972193618 \times 10^{-35}i,2.391041826764737 \times 10^{-17} +$

$0.\,i,2.391041826764737 \times 10^{-17} - 1.925929944387236 \times$

$10^{-34}i,2.391041826764737 \times 10^{-17} + 0.\,i,2.391041826764738 \times$

$10^{-17} - 7.222237291452135 \times 10^{-35}i,2.391041826764737 \times$

$10^{-17} + 3.851859888774472 \times 10^{-34}i,2.391041826764738 \times$

$10^{-17} - 3.851859888774472 \times 10^{-34}i,2.391041826764737 \times$

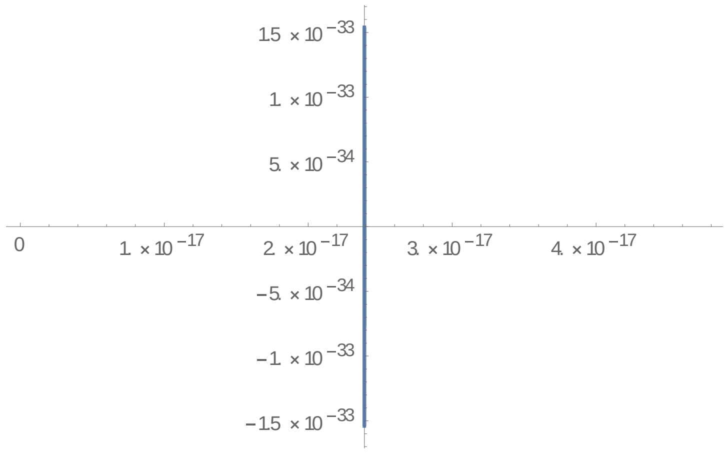
$10^{-17} + 0.\,i,2.391041826764738 \times 10^{-17} + 7.703719777548944 \times$

$10^{-34}i,2.391041826764738 \times 10^{-17} + 3.851859888774472 \times$

$10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i,2.391041826764737 \times$

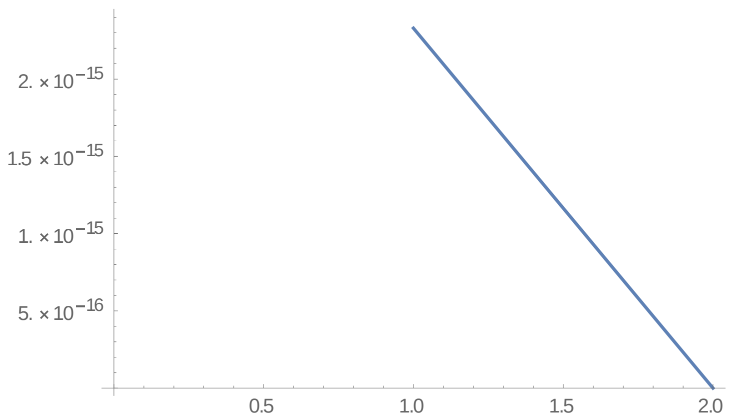
$10^{-17} - 4.81482486096809 \times 10^{-35}i,2.391041826764738 \times 10^{-17} +$

$3.851859888774472 \times 10^{-34}i,2.391041826764738 \times 10^{-17} + 0.\,i\}$



$$i\hbar \frac{\partial \varphi}{\partial t} = \frac{-\hbar^2}{2m} \frac{\partial^2 \varphi}{\partial x^2}$$

$$2.329092109694338 \times 10^{-15}$$



When establishing a relation of proportion in relation to the imaginary number, it is noticed that there is a very large increment in relation to the probability of finding an electron for the chosen frequencies related to the numbers of misiec in a way that violates the mathematical uncertainty of the Schrodinger equation :

n*10^-17------------n*10^-34

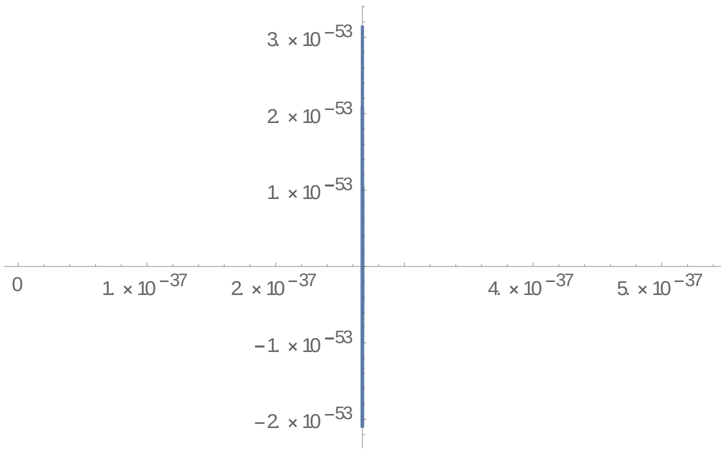
x-----------------------+1 ➔

n*10^-17/n*10^-34= +- n* 10^17 $\sqrt{Probability/volume}$

h1=6.6*10^-34 planck´s constant
sq=Table[j,{j,1000}]
n=Select[sq,PrimeQ,(100)]
m=9.109*10^-30 quark mass in kg

l=0.299 quark frequency
x=Select[sq,PrimeQ,(100)]
n1=Cos[1/n*n^(1/2+n*n*Sqrt[-1])]+Sqrt[-1]*Sin[1/n*n^(1/2+n*n*Sqrt[-1])]
misiec´s zeta complex number
h=h1/n1
k1=n1/l
k=2*Pi/l
a=(h^2*k1^2/(2*m)) modiefied schrodinger´s first term
h2=h1/2*Pi
b=(h2^2*k^2/(2*m)) usual schrodinger´s first term
d=ReIm[a]
e=ReIm[b]
ListLinePlot[d]
ListLinePlot[e]
Plot[a,{a,0,100}]
Plot[b,{b,0,100}]

$i\hbar 1\frac{\partial\varphi}{\partial t}=\frac{-\hbar 1^2}{2m}\frac{\partial^2\varphi}{\partial x^2}\{2.674513514127066\times$
$10^{-37},0.\},\{2.674513514127067\times 10^{-37},0.\},\{2.674513514127066\times$
$10^{-37},-2.61012178719941\times 10^{-54}\},\{2.674513514127067\times$
$10^{-37},-7.83036536159823\times 10^{-54}\},\{2.6745135141\times$
$10^{-37},-6.525304467998525\times 10^{-55}\},\{2.674513514127066\times$
$10^{-37},0.\},\{2.674513514127066\times 10^{-37},5.22024357439882\times$
$10^{-54}\},\{2.674513514127066\times 10^{-37},-5.22024357439882\times$
$10^{-54}\},\{2.674513514127066\times 10^{-37},-2.61012178719941\times$
$10^{-54}\},\{2.674513514127066\times 10^{-37},-5.22024357439882\times$
$10^{-54}\},\{2.674513514127066\times 10^{-37},5.22024357439882\times$
$10^{-54}\},\{2.674513514127066\times 10^{-37},5.22024357439882\times$
$10^{-54}\},\{2.674513514127067\times 10^{-37},-5.22024357439882\times$
$10^{-54}\},\{2.674513514127066\times 10^{-37},-1.305060893599705\times$
$10^{-54}\},\{2.674513514127067\times 10^{-37},0.\},\{2.674513514127067\times$
$10^{-37},5.22024357439882\times 10^{-54}\},\{2.674513514127066\times$
$10^{-37},0.\},\{2.674513514127066\times 10^{-37},0.\},\{2.674513514127066\times$
$10^{-37},0.\},\{2.674513514127066\times 10^{-37},0.\},\{2.674513514127066\times$
$10^{-37},3.262652233999262\times 10^{-55}\},\{2.674513514127065\times$
$10^{-37},0.\},\{2.674513514127066\times 10^{-37},0.\},\{2.674513514127065\times$
$10^{-37},-2.61012178719941\times 10^{-54}\},\{2.674513514127065\times$
$10^{-37},0.\},\{2.674513514127065\times 10^{-37},-1.305060893599705\times$
$10^{-54}\},\{2.674513514127066\times 10^{-37},-5.22024357439882\times$
$10^{-54}\},\{2.674513514127066\times 10^{-37},0.\},$



The proportion remains at the same value before for the electron and the quark: +- 10^17