Opinion

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Double Slit Experiment

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ABSTRACT

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Introduction

In this paper, we consider the famous double slit experience in light of AT Math. We see that familiar values for certain variables reoccur. This model can be used on problems such as virus transmission. We begin with the familiar sine equals cosine (Figure 1).

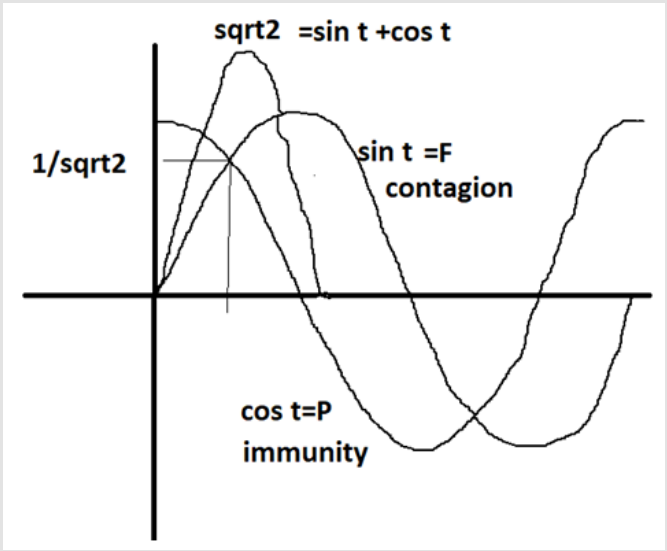

Figure 1: Immunity and Contagion.

Sine = cosine

Immunity =Contagion

$cos\ \theta = sin\ \theta$

Mv=1/t

Ln t(1/√2)=1/t

(1/√2)Ln t=1/t

(1/√2)y=y'

√2y=y'

∫√2y=∫y

(√2)y²/2=y

1/√2 ×y=1

y=√2

$sin\ \theta + cos\ \theta$

=sin 45 +cos 45=

=(1/√2)+(1/√2)

=2/√2

$\mathbf{E} = \sqrt{\mathbf{2}} = \mathbf{max\ of\ sin} + \mathbf{cos}$ (Figure 2)

$E = h\upsilon$

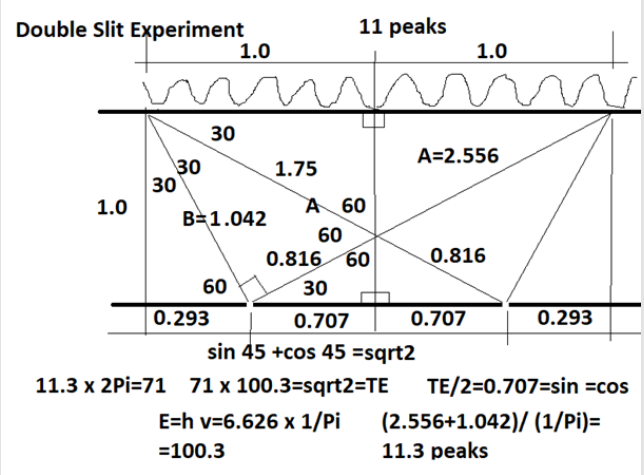

Figure 2: Double Slit Experiment.

=6.626 x 1/π

=208.82

$$y = f(x) = 1/\sigma\sqrt{(2\pi)}\ exp[(-1/2(X-\mu)/\sigma]^2$$

$$exp\left[(-1/2(X-\mu)/\sigma\right]^2 = exp\left[-1/2(0)/\sigma\right]^2 = exp0 = 1$$

y=f(x)=1/σ√(2π) [1]

E=y=2.08816(√(2π)=1/σ

σ=.191

Entropy

$$S = 1/2(Ln\ [2\pi e\sigma^2]$$

=-0.2366

t^2-t-1=S=-0.2366

t^2-t-1.2366=0

t=1.719 ; 0.719

E=0.582; 1.39

M=Ln t

=Ln 1.719

=542

M=Ln 0.719

=330

$$TE = M\left[0.15915\right] = 542(1/2\pi) = 0.863 \sim 1/sin\ 60°$$

TE=330[1/2π]=52.52

-1/2[X-μ)/σ]²=1

[(X-μ)(0.191)]²=-2

(X-μ)²=-0.7296

(X-1/2)²=-0.73

X^2-X+1/4=-0.73

X^2-X-1=0

GMP

V=iR

105i(1)

$i=t^2$

√105=t

t=10.247

X^2-X-1=0

10247^2-10247-1=9397~940

$$f(x) = 1/(0.191)\sqrt{(2\pi)}exp\ \left[(940-0.5)/0.191\right]^2$$

=[1/0.191√2] ×(201.7)

=0.7467~3/4=1/s

s=t

E=3/4 =1/s=1/t (Figure 3)

$$\Delta L = d\ sin\ \theta$$

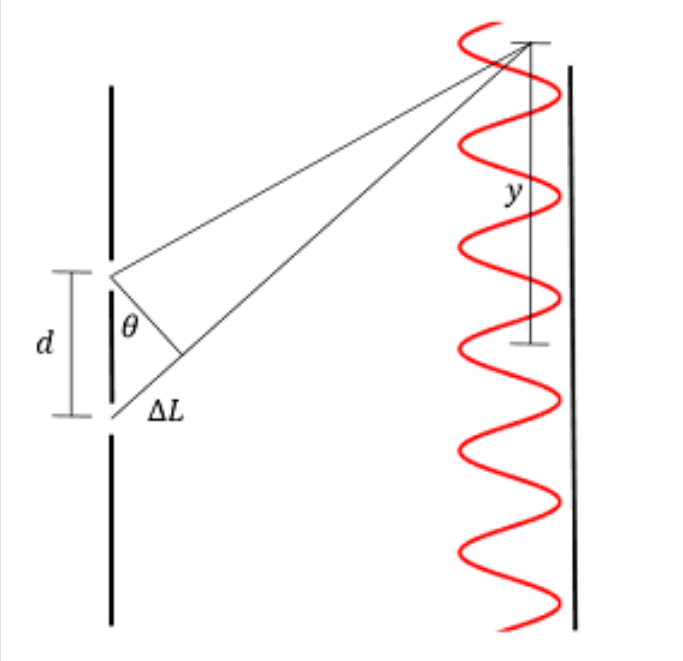

Figure 3: Double Split Experiment.
Note: https://brilliant.org/wiki/double-slit-experiment/

ΔL=(1.042-2.556)=1.514

1.514=√2 sin θ

sin θ=-1.514/√2

=-1.07056

θ=-0.618

$$dsin\ \theta = n\lambda$$

(√2)(-.107056)=11.3 λ

λ=1.339=1/E=t

t^2-t-1=E

E=546

GMP E=-1.247

dθ=y

y=θ=-.0.618

nλ=dy/D

11.3λ=(1/√2)(-1.0786)/ (1)

λ=1.047~105=V+

λ=h/$\bar{P}$

104.7=6.626/$\bar{P}$

$\bar{P}$=158.~π/2=cos θ

θ=809=1/c^4

y=nλD/d

1=11.3(λ)(1)/(√2)

λ=8

1/λ=1.25=Emin

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