## Light wave???

Right, but I'm saying it's, you know, all these things are just, ah, interesting, so it should work here, and then punch in, well, according to this, it would be this. Well, they're approximately equal, so it's approximately this. Okay, that seems to be a coincidence, but, you know, it's approximately, it's not exact. So then it would have to hold true here. Holy shit, it works. Then it would have to hold true here. Holy shit, it works. And like we're saying, well, let's see if it tests and holds true when we're testing it at, you know, on Earth moving, and holy shit, it holds true.

We get the same angular momentum and we get the same energy jewel, whatever you want to call it here, without gravity, without mass.

```
(x'(t) = ((0.002×31583458/π×360/361)×3/2 + (360 - 361))/1.01×m/s = (361 °)/(360 °)×m/s) Earth | orbital angular momentum
```

```
(D[x, t] == (((0.002 (31583458/Pi) (360/361)) (3/2) + (360 - 361))/1.01) (m/s) == ((361 Degree)/(360 + (360 - 361))/1.01) (m/s) == ((360 Degree)/(360 + (360 Degree)/(360 + (360 Degree)/(360 Degree)/(36
```

 $2.661 \times 10^40 \text{ J s (joule seconds)} (x'(t) = (29777.7 \text{ m})/\text{s} = (\text{m } 0.0175/^{\circ} (\text{reciprocal degrees}))/\text{s})$ 

```
(x'[t] == (29777.7 \text{ m})/s == (m \text{ Quantity}[(361 \text{ Degree})/360, 1/"AngularDegrees"])/s) \text{ Quantity}[2.661*^40, 1/"AngularDegrees"])/s)
```

0.0175° =1 bit in (128 bit/5)~=0.0015625

Or with

Cube root  $(1/360^{\circ})_{=0.0255\%/2} = 0.0128\%$ 

Or with

# **RGB** binary light frequency

 $(30-(((1\div128\div5)\times100\times360+3)\div2))\times3=1.125\sim1+(128/100)-(3/100);$ 

- 128 with ARGB|KXYM ((127|127),255,255,255) = 128/5
- ×100×360 = to % times 360°
- +3 for the 3 255
- divided by 2 for the sign bit in 127!128 difference
- x3 channels
- 30° sine oscillation before it inverts to 30-above as 30° in the 360° base 10 notation

```
30 \times ((((3+(1\div360)\exp\{(1\div3))\div\pi)\}\exp\{(-(1\div9)\}))) \times 10^7 \text{m/s}^2 \setminus \text{light acceleration}
```

 $Sin(30^\circ)$  of 3 dimensions moving 1/360° or pi from 1/3 dimensions to 1/32 of 2 dimensions of time in 3 dimensions is the same acceleration of wave lengths in C=300,000,000m/s constant.

Light moves ~1.27% faster then its maximum velocity to form its wavelengths of different colour.

#### In unmnanometer movements phase shift:

- Blue to Green from slowest to mid-point is 0% to (1.27%/2)=1.134%
- Green to Red mid-point to highest is (1.27%/2) to 1.27%

### Earth Orbital Seconds of m/s<sup>2</sup>

 $(x'(t) = ((0.002 \times 31583458/\pi \times 360/361) \times 3/2 + (360 - 361))/1.01 \times m/s = (361 °)/(360 °) \times m/s) \ Earth | \ orbital \ angular momentum$   $(D[x, t] == (((0.002 (31583458/Pi) (360/361)) (3/2) + (360 - 361))/1.01) \ (m/s) == ((361 \ Degree)/(360 - 3$ 

Add to this result:

 $3 + \sqrt{3}{\frac{1}{360}} \times 3 + 0.14159265$ 

This gives:

3 + 0.14159265\ldots \approx 3.14159265\ldots

4. Compare with:

The value is approximately:

\pi \approx 3.14159265358979

### i<sup>2</sup> as a rational

Assuming i² is a choice of limits forming a Cartesian Plane iX and iY, we can represent the uncertainty i²=-1 as a limit of two matrices from  $1 \ 0 \ -1$  or  $-1 \ 0 \ 1$  as inf $\ 0 \ -1$  inf or -inf $\ 0 \ 0$  inf.

Defining and clarifying each axiom and how they relate to matrix transformations and limits.

1. Define the Imaginary Unit

The imaginary unit can be understood in terms of its vector representation. It represents a 90° rotation in the complex plane:

Vector Representation: as -1 on a vector implies a 90° rotation:

i = \text{rotation by } 90^\circ

Limits: The movement can be represented as transitions from 0 to -1 or from 1 to 0.

2. Square of

The square of is:

 $i^2 = -1$ 

3. Cartesian Grid and Perpendicular Vectors

Given:

```
i^2 = x \cdot cdot y
i^2 = a^2 + b^2 = c^2
                     4. Matrix Representation
You correctly identified the matrices:
Matrix:
M_1 = \left[ p_1 \right] 0  i \\ 1 & 0 \end{pmatrix}
Matrix: Perpendicular to:
M_2 = \left[ \text{pmatrix} \ 0 \ 1 \right] i \ 0 \ \text{end} 
                     5. Matrix Inversion and Transformation
To invert and represent it in terms of real constants:
Inverse of:
M_1^{-1} = \left[ \max 0 \& 1 \right] i \& 0 \left[ \max \right] = M_2
Real Matrix Transformations:
For and:
M_{r1} = \beta_{pmatrix} 1 \& 0 \ 0 \& -1 \
M_{r2} = \left[ \text{pmatrix} \ 1 \& 0 \setminus 0 \& -1 \right]
1$$
                     6. Limits and Inversion
The transformation in the matrix can be described in terms of limits:
Limits:
\text{From } 0 \text{ to } i \text{ and } 1 \text{ to } 0
Inverted Matrix:
M_{\text{inv}} = \left[ \frac{1 \& 0 \setminus 0 \& -1 \cdot m_{\text{pmatrix}} \right]
                     7. Formalizing the Derivative
Define to capture the rate of change of :
d(i^2) = \frac{d}{dt} \left( \frac{d}{dt} \right) 0 \in \frac{d}{dt} \left( \frac{d}{dt} \right) 0 \in \frac{d}{dt} \cdot 0 \in
\end{pmatrix} \right)
                     8. Formalizing in a Matrix Context
To summarize, the formalization can be represented as:
d(i^2) = \frac{d}{dt} \left[ \left( i^2 \right) - \frac{d}{dt} \right] 0 & i(t) \\ 1 & 0 \\ i(t) & 0 \\
```

\end{pmatrix} \right] = \begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}

Summary

- 1. Vectors and Limits: represents a 90° rotation on a Cartesian grid.
- 2. Matrix Representation: Use matrices and to describe transitions.
- 3. Inversion and Real Representation: Determine inverses and real matrix forms.
- 4. Formalizing: Capture the derivative of in terms of matrices and limits.

#### **Draft Formalization**

1. Definition of the Imaginary Unit

Axiom: The imaginary unit represents a 90° rotation in the complex plane.

Vector Representation: can be visualized as moving perpendicular to the real axis (x-axis) in a Cartesian plane, which gives the rotation:

\$ i = \text{rotation by } 90^\circ.

1 \to 0 \to -1

\infty \to 0 \to -\infty. \$\$

2. Square of the Imaginary Unit

Axiom: The square of the imaginary unit yields:

 $i^2 = -1$ .

3. Cartesian Grid and Perpendicular Vectors

Axiom: In a Cartesian grid, perpendicular vectors represented by imply that:

$$i^2 = a^2 + b^2 = c^2$$

4. Matrix Representation

Axiom: We represent rotations in terms of matrices.

Matrix 1:

 $M_1 = \left[ \max 0 \& i \setminus 1 \& 0 \right]$ 

Matrix 2 (Perpendicular to ):

 $M_2 = \left[ \text{pmatrix} \ 0 \ \text{1 } \right] \ \text{i } \ \text{0 } \ \text{matrix}.$ 

5. Matrix Inversion and Transformation

Axiom: Matrix inverses allow us to transition between different representations.

Inverse of:

 $M_1^{-1} = \left[ \frac{0 & 1 \\ i & 0 \\ matrix \right] = M_2.$ 

 $M_{r1} = \left( \frac{m_{r1}}{0} \right) 1 \& 0 \ 0 \& -1 \ \$ 

6. Limits and Inversion

Axiom: Matrix transformations can be understood in terms of limits.

Transformation in Limits: The transformation in the matrix can be described in terms of limits:

\text{From } 0 \text{ to } i \text{ and } 1 \text{ to } 0

 $M_{\text{inv}} = \left[ p_{\text{inv}} \right] = 0 \ 0 \ 0 \ -1 \$ 

7. Formalizing the Derivative

Axiom: The rate of change of can be captured by differentiating matrix transformations.

Formal Derivative: The derivative of the matrix transformation:

 $\frac{d}{dt} \left( \left( \left( \right) \ 0 \right) \ 0 \right) \ 0 \in \mathbb{R}$ 

8. Formalizing in a Matrix Context

Axiom: The formalization of the transformation of through matrix multiplication gives:

#### Summary

- 1. Vectors and Limits: The imaginary unit defines a 90° rotation in the Cartesian grid, and the transformations can be captured via matrix limits.
- 2. Matrix Representation: and describe the transitions in the complex plane.
- 3. Inversion and Real Representation: The inverse of is , and the real part of the matrices describes simpler real-world transformations.
- 4. Formalizing: The derivative of the matrix product captures the change in the transformation, which results in a zero matrix.