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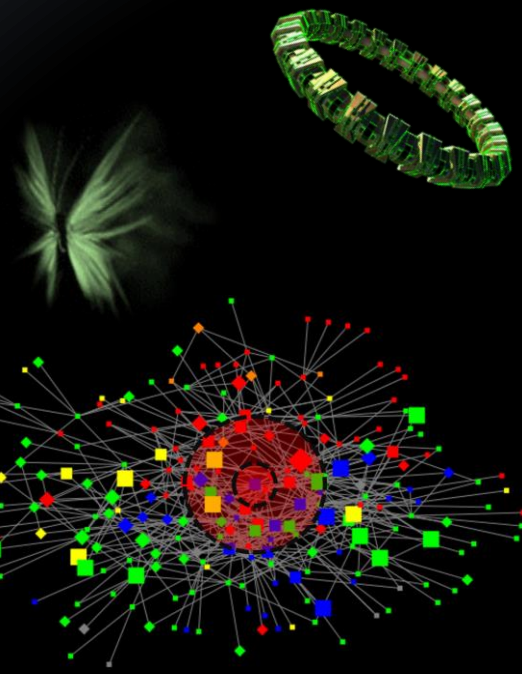
Cybernetic Transformation of Next Human Generation

Be successfully smart
with a personalized knowledge-base
by connecting dots in
STEEMA



EdTech in AI & KT

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S-T-E-E-M-A

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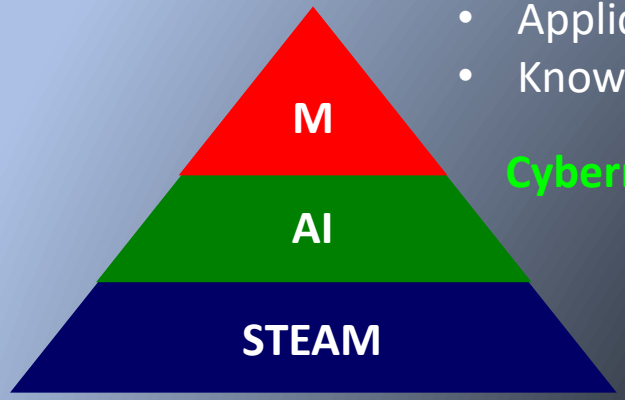
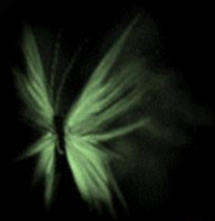


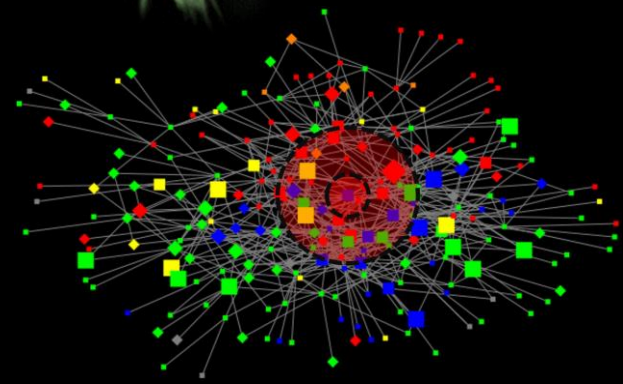
- Motivations – Vision & Value (Macro Finance)
- Applications – Problem-Solving Co-Op w/ AI
- Knowledge & Skills – Maker-SOP in STEAM

Cybernetic Training Pyramid



Current ed systems need to enhance:

- Understanding the World
- Critical/Creative Thinking
- Smart on Information
- Social Skills



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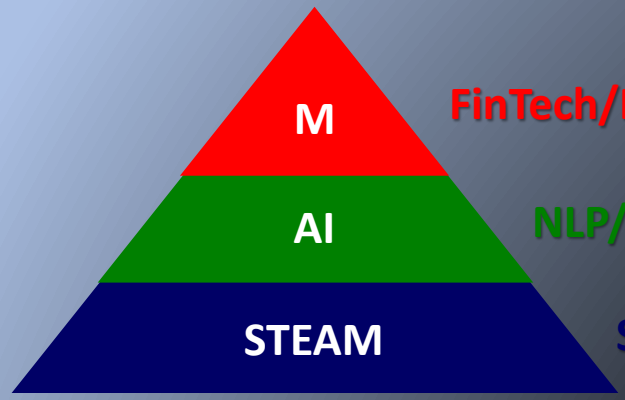
Cybernetic Learning Program

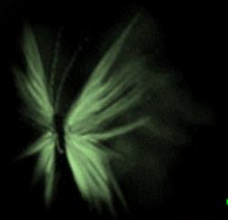
CLP 5x5x5 - 20190831



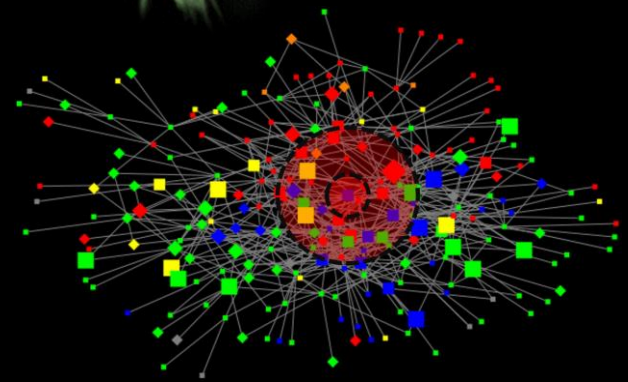
FinTech/BioTech/EdTech/EnviroTech/AstroTech

NLP/KG/VAR/BC/QC

S/T/E/A/M



- **M : AstroTech** – Satellite-Internet
- **AI : Quantum Computing** – Feynman's Ideas
- **STEAM : Math** – Function/Superposition



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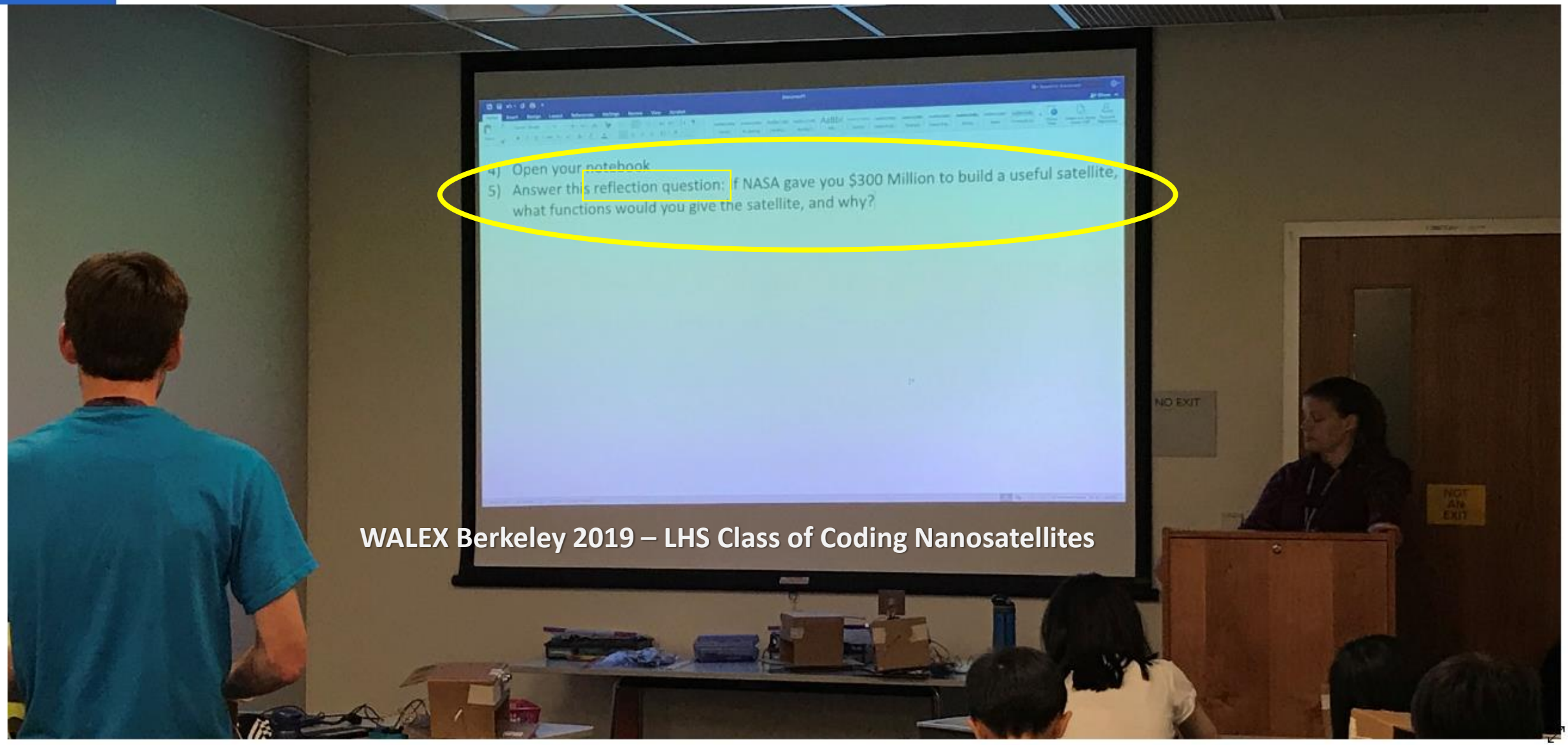

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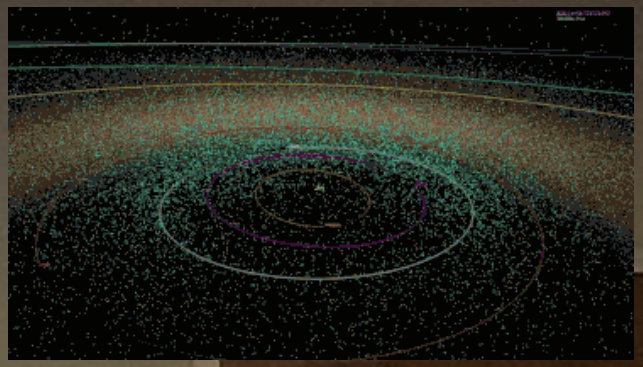

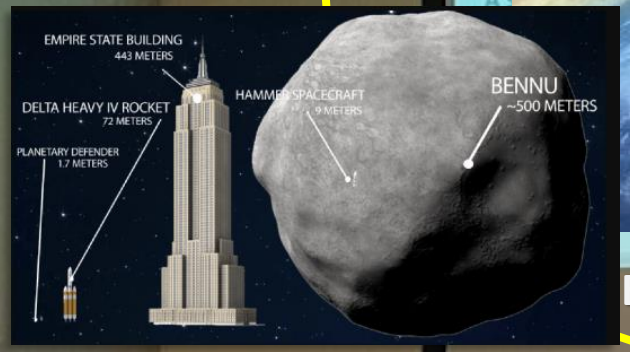

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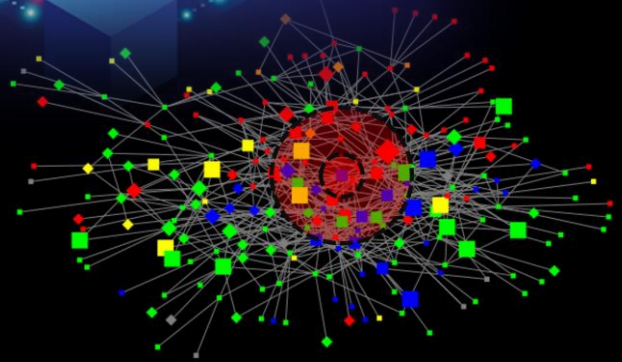
M : AstroTech – Satellite-Internet

ISLEMMA-Chain-of-Keywords :

eCommerce-King-Amazon-CEO-Bezos-
World-Richest-Man having*?! Space-Dream w/
Satellite-Internet*-&?!-Blue-Moon*

Amazon-AI-Alexa-Echo-Smart-Home-IoT

Satellite-Internet-IoT-5G/Quantum-Internet* w/ Hacking*-Proof



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America's economic future hinges on this overlooked educational skill

PUBLISHED TUE, AUG 6 2019 • 10:30 AM EDT | UPDATED TUE, AUG 6 2019 • 9:03 PM EDT

Jennifer Openshaw @JOPENSHAW
Deepak Hegde @DEEPAKHEGDE_EFL

KEY POINTS

- STEM (science, technology, engineering, and mathematics) educational initiatives will not create the next generations of leaders that can maintain America's global edge.
- Entrepreneurs create more than twice the number of jobs as large legacy companies, according to a 2016 EY study.
- Business icons including Bill Gates, Steve Jobs, Jack Dorsey and Oprah Winfrey used the spirit of entrepreneurship to drive innovation.

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8/29/2019

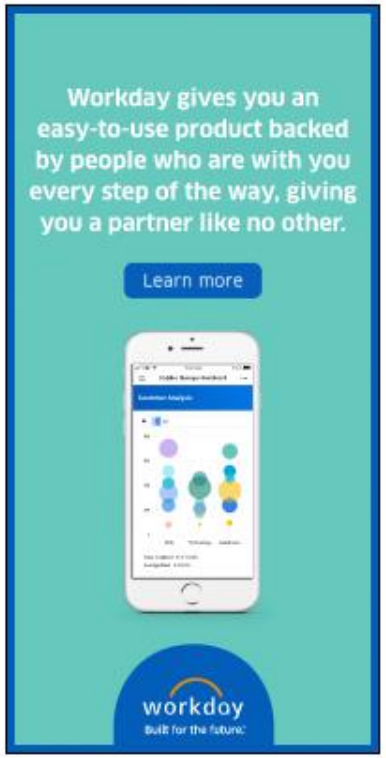
Despite the sharp rise of women who now hold MBAs and STEM degrees, only 20% of women enjoy leadership positions in industry. Worse, the World Economic Forum predicts another 202 years before women begin to earn the same pay as men.

Hero Images | Hero Images | Getty Images

If we continue the STEM conversation as it stands, the U.S. is staring down a bleak future. Well intended as they are, the educational initiatives currently in place meant to equip our kids today and our country tomorrow with the ability to compete and win globally simply can't get us there.

The problem is that our students are receiving little if any support to guide that initial germ of an idea and help it flourish into a real business. School curricula have generally fallen short with respect to skills-based business learning and preparing students to lead. That's why it's time — from our classrooms to our boardrooms — to replace STEM with STEEM.

STEEM (science, technology, engineering, *entrepreneurship*, and mathematics) is the academic ecosystem that will prepare the minds and nurture the talent,



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INVESTING IN SPACE

Here's why Amazon is trying to reach every inch of the world with satellites providing internet

PUBLISHED SUN, APR 7 2019 • 10:00 AM EDT | UPDATED MON, APR 8 2019 • 10:27 AM EDT

Michael Sheetz
@THESHEETZTWEETZ

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KEY POINTS

- Amazon is working on Project Kuiper, which would put 3,236 satellites into orbit to provide high-speed internet to any point on the globe.
- "You can see the clear profit motive here for Amazon: 4 billion new customers," Space Angels CEO Chad Anderson said.
- CNBC spoke to more than a dozen space industry analysts and executives about Amazon's proposal and the customers, competitors and costs involved.

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AEROSPACE & DEFENSE

Jeff Bezos unveils lunar lander to take astronauts to the moon by 2024

PUBLISHED THU, MAY 9 2019 • 4:42 PM EDT | UPDATED FRI, MAY 10 2019 • 4:25 PM EDT

Michael Sheetz
@THESHEETZTWEETZ

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KEY POINTS

- Blue Origin founder Jeff Bezos unveiled the company's "Blue Moon" lunar lander on Thursday, as well as a new BE-7 rocket engine.
- "I love Vice President Pence's 2024 lunar landing goal," Bezos said, adding that Blue Origin can meet that timeline "because we started this three years ago."
- Bezos invests more than $1 billion in Blue Origin each year, through sales of his Amazon shares.

TRENDING NOW

1 US intel assessment says mysterious Russian explosion was not from testing nuclear-powered missile

2 Panera is losing nearly 100% of its workers every year as fast-food turnover crisis worsens

3 The third 2020 Democratic debate lineup is set: Here's who made the cut

4 Democratic candidate

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WASHINGTON — Jeff Bezos, chairman of Amazon and founder of Blue Origin, unveiled his space company's lunar lander for the first time on Thursday.

"This vehicle is going to the moon," Bezos said during an invite-only presentation to media and space industry executives.

"We were given a gift — this nearby body called the moon," Bezos said. He added that the moon is a good place to begin manufacturing in space due to its lower gravity than the Earth. Getting resources from the moon "takes 24 times less energy to get it off the surface compared to the Earth," Bezos said, and "that is a huge lever."

The Blue Moon lander can bring 3.6 metric tons to the lunar surface, according

TRENDING NOW

1 US intel assessment says mysterious Russian explosion was not from testing nuclear-powered missile

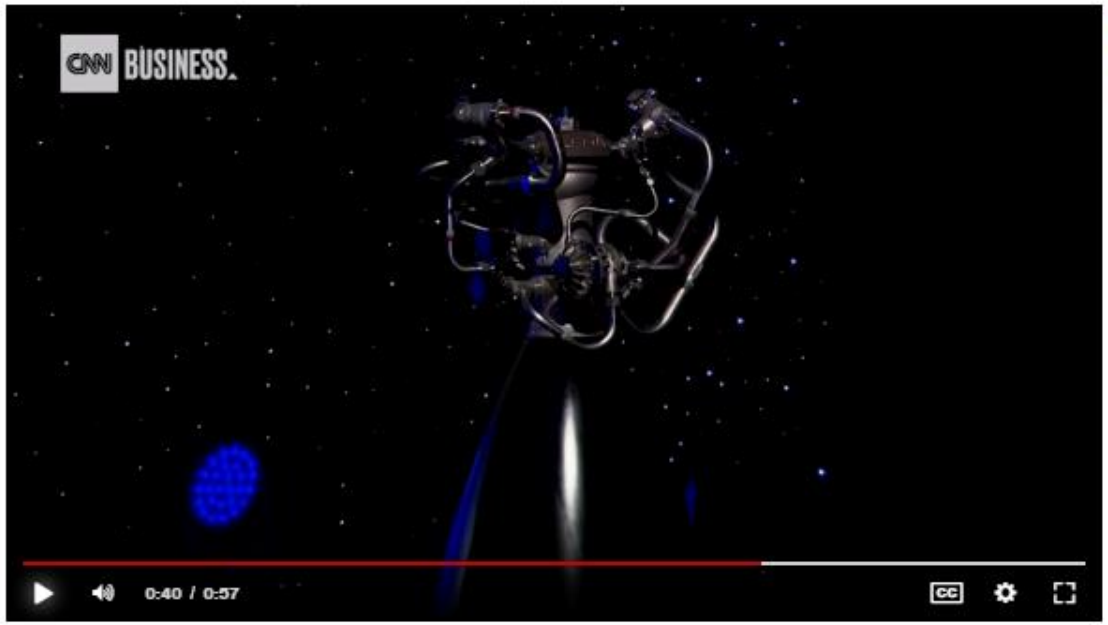
2 Panera is losing nearly 100% of its workers every year as fast-food turnover crisis worsens

3 The third 2020 Democratic debate lineup is set: Here's who made the cut

4 Democratic candidate Beto O'Rourke releases trade plan that would end Trump's China tariffs

5 Elon Musk: 'A.I. will make jobs kind of pointless' — so study this

Beyond Earth



Jeff Bezos unveils his big plans for the moon

Blue Origin founder Jeff Bezos announced his intentions to go back to the moon, this time to stay.

Source: CNN

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BEYOND EARTH (15 VIDEOS)

Jeff Bezos unveils

Why this beer uses

See the moon

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2019 Is The Year Nano-Satellites Will Deliver Internet Access To All

Joe Wallen Contributor
Fintech

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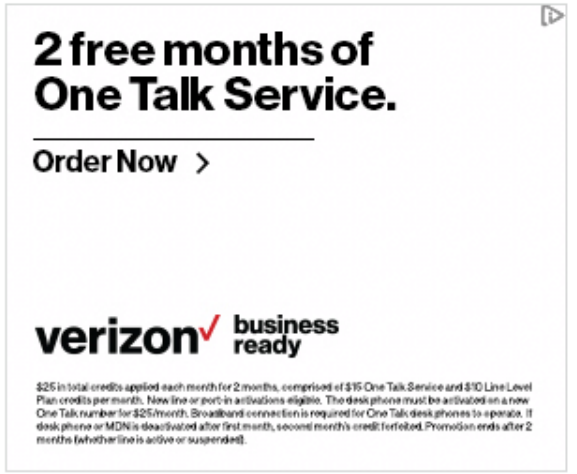
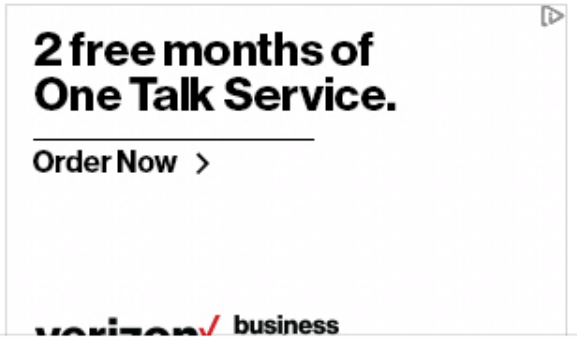
this week and will circle the earth daily" HIBER

Change The World

Hiber's system can facilitate access to the internet in even the remotest areas of the planet making the organization very excited about the positive impact their coverage could have on specific industries, from fishing and agriculture to climate science.

For example, the Indonesian government passed a law in July 2017 requiring every fishing boat in the country with a capacity equal to or exceeding 30 gross tonnes to install a Vessel Monitoring System (VMS) so as to reveal its location and activity. The archipelago nation has an estimated 1.3 million fishing vessels, of which an incredible 90% are thought to operate illegally. While its government understands that many of the fishermen are simply trying to feed their families, it hopes that by tracking their activity it can better restrict fishing in Marine Protected Areas and protect dwindling fishing stocks. As an incentive for fishermen to sign up, the Indonesian government is providing free insurance and a vessel identification number to fishermen with a VMS — both legal requirements for fishing in





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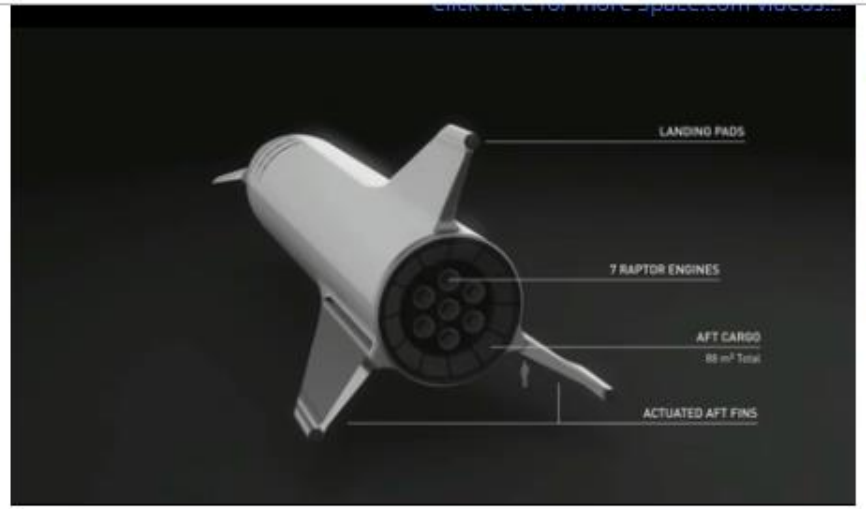

That would be a huge boost over SpaceX's launch revenue, which tops out at around $3 billion per year, Musk added. The extra money could allow SpaceX to do what Musk has repeatedly said is the company's main goal: help humanity become a multiplanet species.

"We think this is a key steppingstone towards establishing a self-sustaining city on Mars and a base on the moon," Musk said of Starlink. "We believe we can use the revenue from Starlink to fund Starship."

Starship is the reusable, 100-passenger spaceship that SpaceX is developing to ferry people to the Red Planet and other distant destinations. That spacecraft will launch atop a giant rocket called Super Heavy, which will also be reusable, the company has said.

SpaceX's Red Planet spaceship is already in the flight-test phase; a scaled-down prototype called Starhopper recently made a brief, tethered jump at SpaceX's

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The Quantum Internet Is Emerging, One Experiment at a Time

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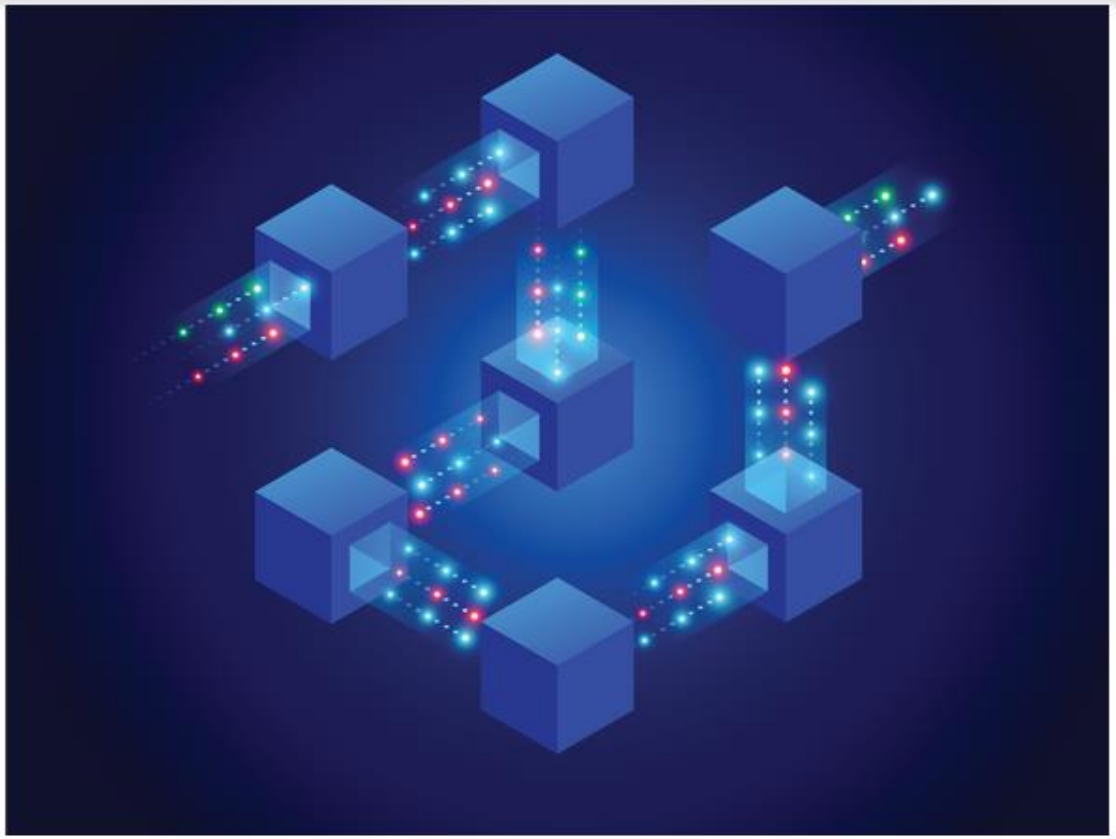

Credit: Olena Ostapenko *Getty Images*

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Jasper Hamill Tuesday 5 Jun 2018 11:32 am

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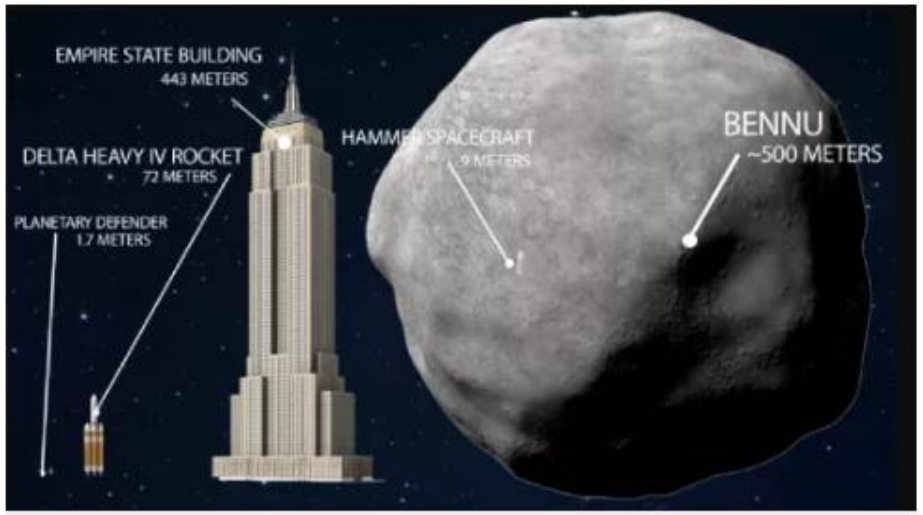

This graphic shows the size of Asteroid Bennu compared to a tiny 'planetary defender' spaceship designed to gently nudge it off course (Credit: Lawrence Livermore National Laboratory)

Both Nasa and the European Space Agency are rushing to discover a method of deflecting or destroying space rocks on a collision course with Earth, but there's a long way to go

Asteroid Bennu, for instance, has a 1 in 2,700-chance of striking Earth in 2135, and it is estimated that the energy unleashed in this impact would be equivalent to 1,200 megatons, which is 80,000 times the energy released by the Hiroshima bomb.

It's likely we will be able to figure out how to deal with this monster asteroid over the next century and make sure it doesn't come anywhere near us, perhaps by using a small spacecraft to push into a new course or simply blowing it up.

But if an asteroid just appeared on the horizon one day, we really would have

He handed in a letter of resignation this morning. »

Nurse used patient's vagina as ventriloquist's dummy 'to amuse colleagues'

He pulled her labia apart and said: 'Hello, my name is Patient A' in front of horrified colleagues. »

Unborn calves plucked from inside dead whales after barbaric slaughter

The seas of the Faroe Islands turned red with blood. »

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Cybernetic Transformation of Next Human Generation

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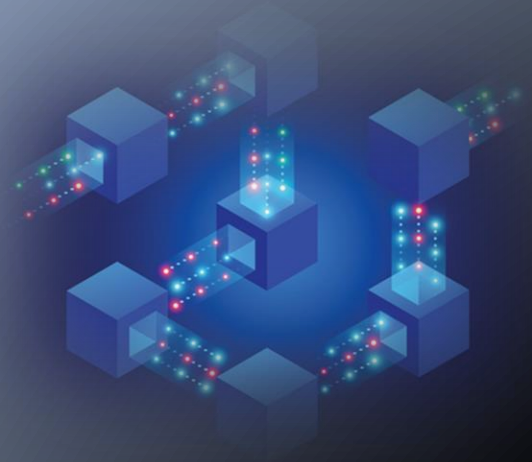

AI : QC – Feynman's Ideas*

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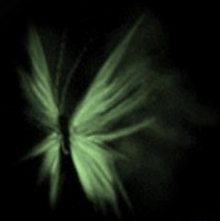
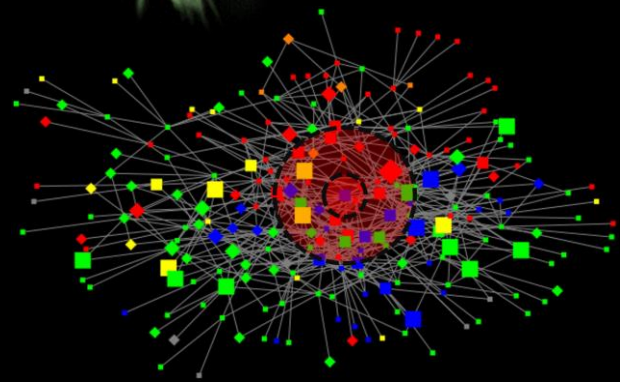


Key-Ideas :

- **Deep-Learning** Simulation-Function - ISLEMMA
- **Qubit** in **Quantum-Superposition** Formation



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International Journal of Theoretical Physics, Vol. 21, Nos. 6/7, 1982

Simulating Physics with Computers

Richard P. Feynman

Department of Physics, California Institute of Technology, Pasadena, California 91107

Received May 7, 1981

1. INTRODUCTION

On the program it says this is a keynote speech—and I don't know what a keynote speech is. I do not intend in any way to suggest what should be in this meeting as a keynote of the subjects or anything like that. I have my own things to say and to talk about and there's no implication that

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2. SIMULATING TIME

First I'd like to talk about simulating time. We're going to assume it's discrete. You know that we don't have infinite accuracy in physical measurements so time might be discrete on a scale of less than 10^{-27} sec. (You'd have to have it at least like to this to avoid clashes with experiment—but make it 10^{-41} sec. if you like, and then you've got us!)

One way in which we simulate time—in cellular automata, for example—is to say that "the computer goes from state to state." But really, that's using intuition that involves the idea of time—you're going from state to state. And therefore the time (by the way, like the space in the case of cellular automata) is not simulated at all, it's imitated in the computer.

An interesting question comes up: "Is there a way of simulating it, rather than imitating it?" Well, there's a way of looking at the world that is called the space-time view, imagining that the points of space and time are all laid out, so to speak, ahead of time. And then we could say that a "computer" rule (now computer would be in quotes, because it's not the standard kind of computer which cperates in time) is: We have a state s_i at each point i in space-time. (See Figure 1.) The state s_i at the space time point i is a given function $F_i(s_j, s_k, \ldots)$ of the state at the points j, k in some neighborhood of i:

$$s_i = F_i(s_j, s_k, \ldots)$$

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$$s_i = F_i(s_j, , s_k, \ldots)$$

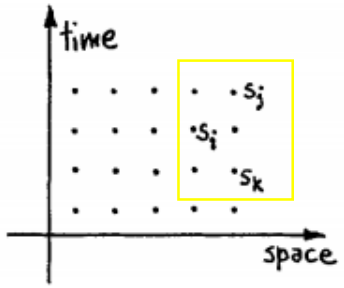

Fig. 1.

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7. POLARIZATION OF PHOTONS—TWO-STATES SYSTEMS

I would like to show you why such minus signs cannot be avoided, or at least that you have some sort of difficulty. You probably have all heard this example of the Einstein-Podolsky-Rosen paradox, but I will explain this little example of a physical experiment which can be done, and which has been done, which does give the answers quantum theory predicts, and the answers are really right, there's no mistake, if you do the experiment, it actually comes out. And I'm going to use the example of polarizations of photons, which is an example of a two-state system. When a photon comes, you can say it's either x polarized or y polarized. You can find that out by putting in a piece of calcite, and the photon goes through the calcite either out in one direction, or out in another—actually slightly separated, and then you put in some mirrors, that's not important. You get two beams, two places out, where the photon can go. (See Figure 2.)

If you put a polarized photon in, then it will go to one beam called the ordinary ray, or another, the extraordinary one. If you put detectors there you find that each photon that you put in, it either comes out in one or the other 100% of the time, and not half and half. You either find a photon in one or the other. The probability of finding it in the ordinary ray plus the probability of finding it in the extraordinary ray is always 1—you have to have that rule. That works. And further, it's never found at both detectors. (If you might have put two photons in, you could get that, but you cut the intensity down—it's a technical thing, you don't find them in both detectors.)

Now the next experiment: Separation into 4 polarized beams (see Figure 3). You put two calcites in a row so that their axes have a relative angle ϕ, I happen to have drawn the second calcite in two positions, but it doesn't make a difference if you use the same piece or not, as you care. Take

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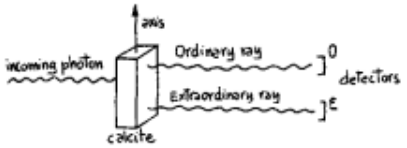
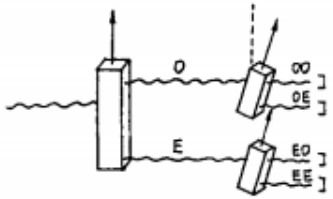


Fig. 2.



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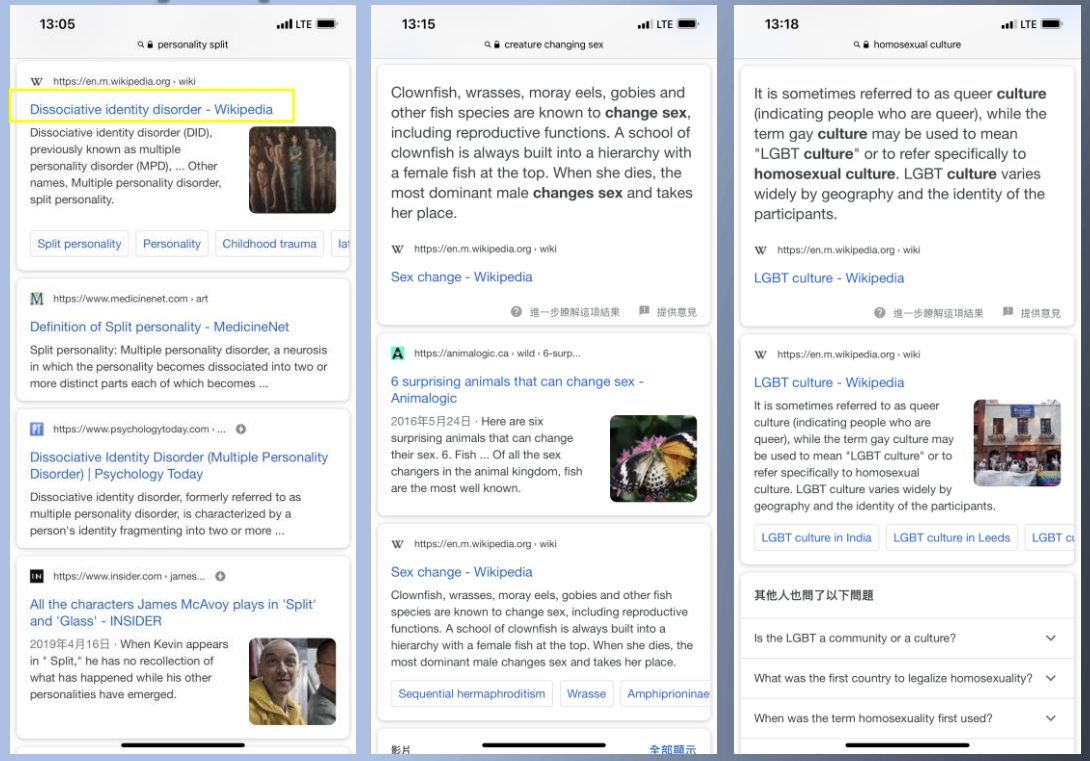
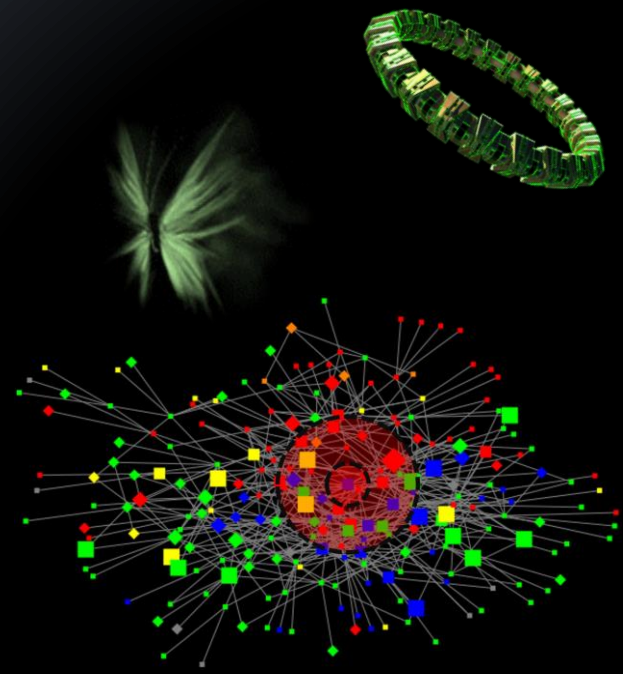
Heuristic*-Example for Qubit vs Bit :

Personality-Split

DID-2





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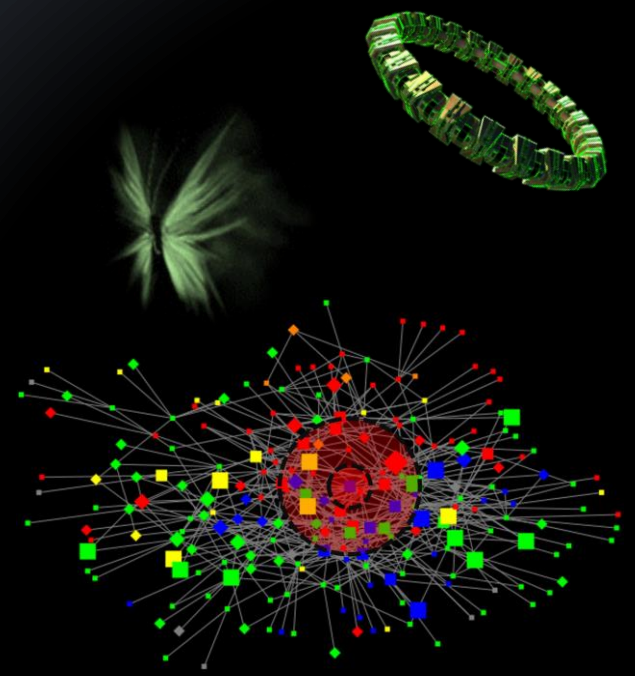
S-T-E-E-M-A

STEAM : Math – Function/Superpoition

ISLEMMA-Chain-of-Keywords :

Asteroid-Shield-Mechanism-Engineering in
Mathematical-Formulation from
Step-Functions to
Continuous-Function-in-Superposition-Theory
as
Learn-by-Play-Motivation into
Machine-Learning-&-Quantum-Computing



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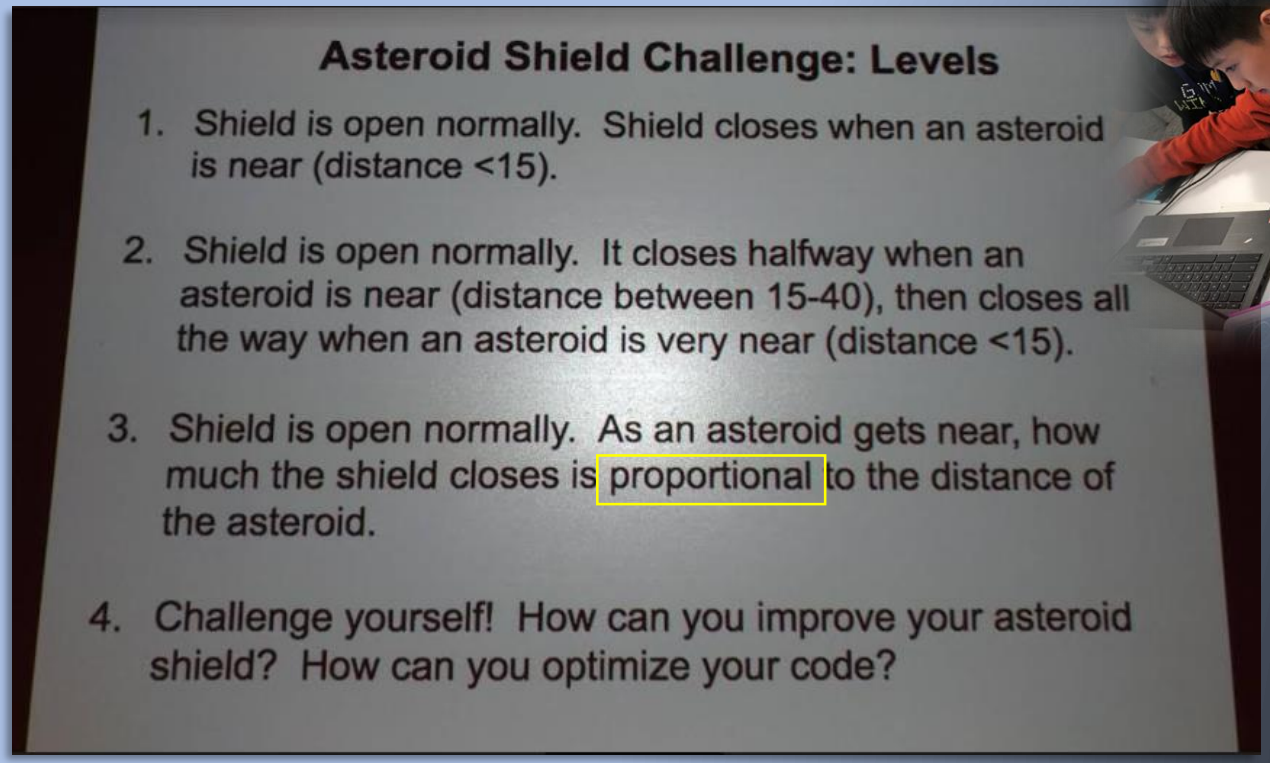

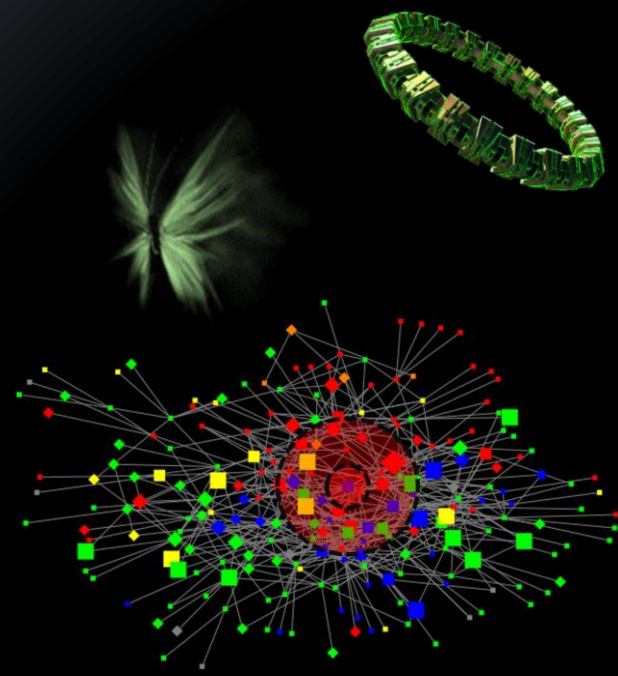

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Cybernetic Transformation of Next Human Generation

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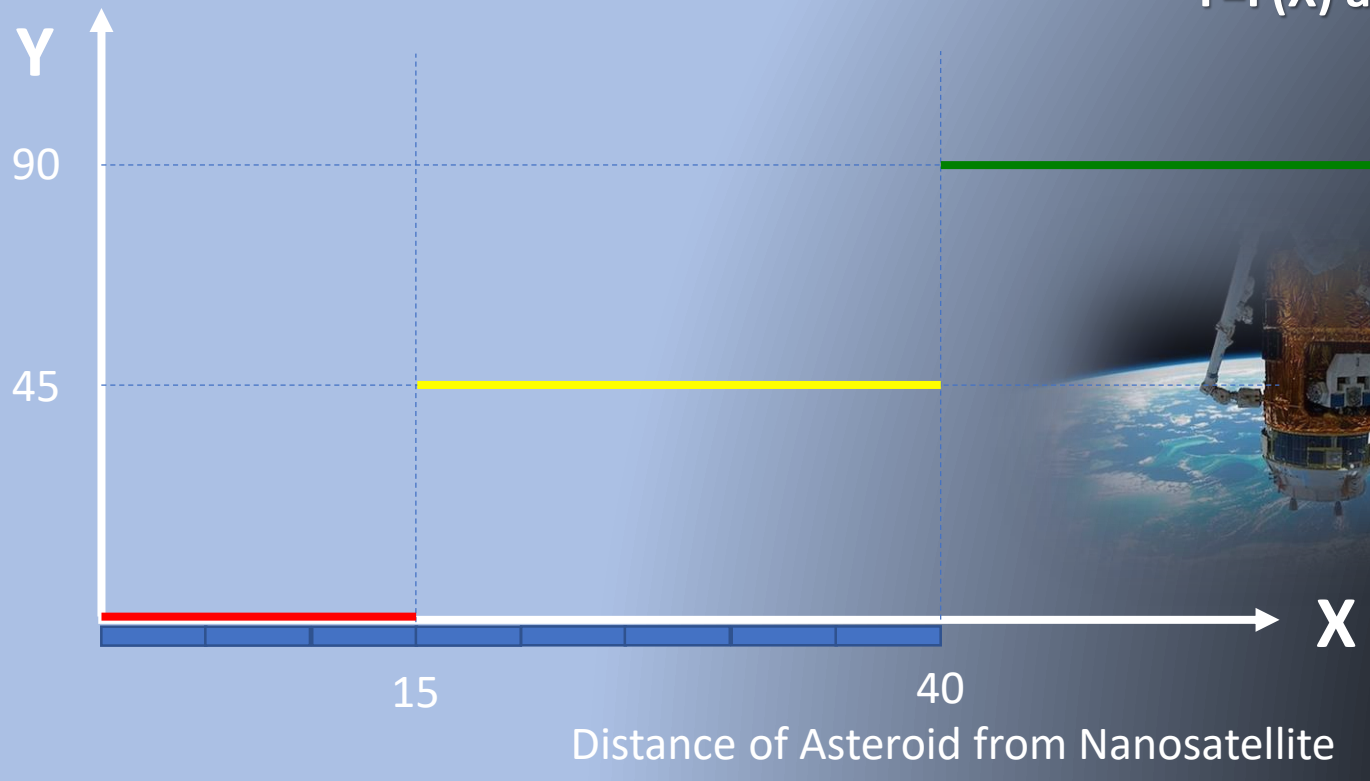
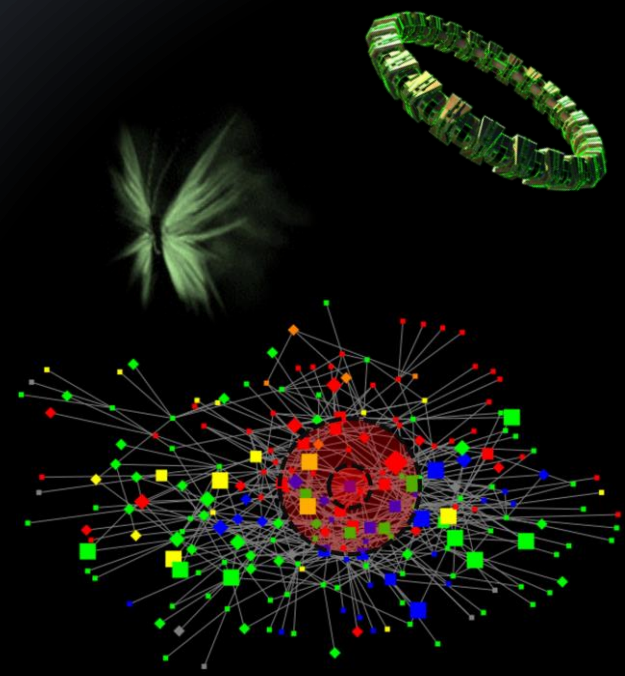
Coding Nanosatellites from Engineering to Mathematical Formulation

Opening-Angle of Asteroid-Shield

Y=F(X) as Step Function





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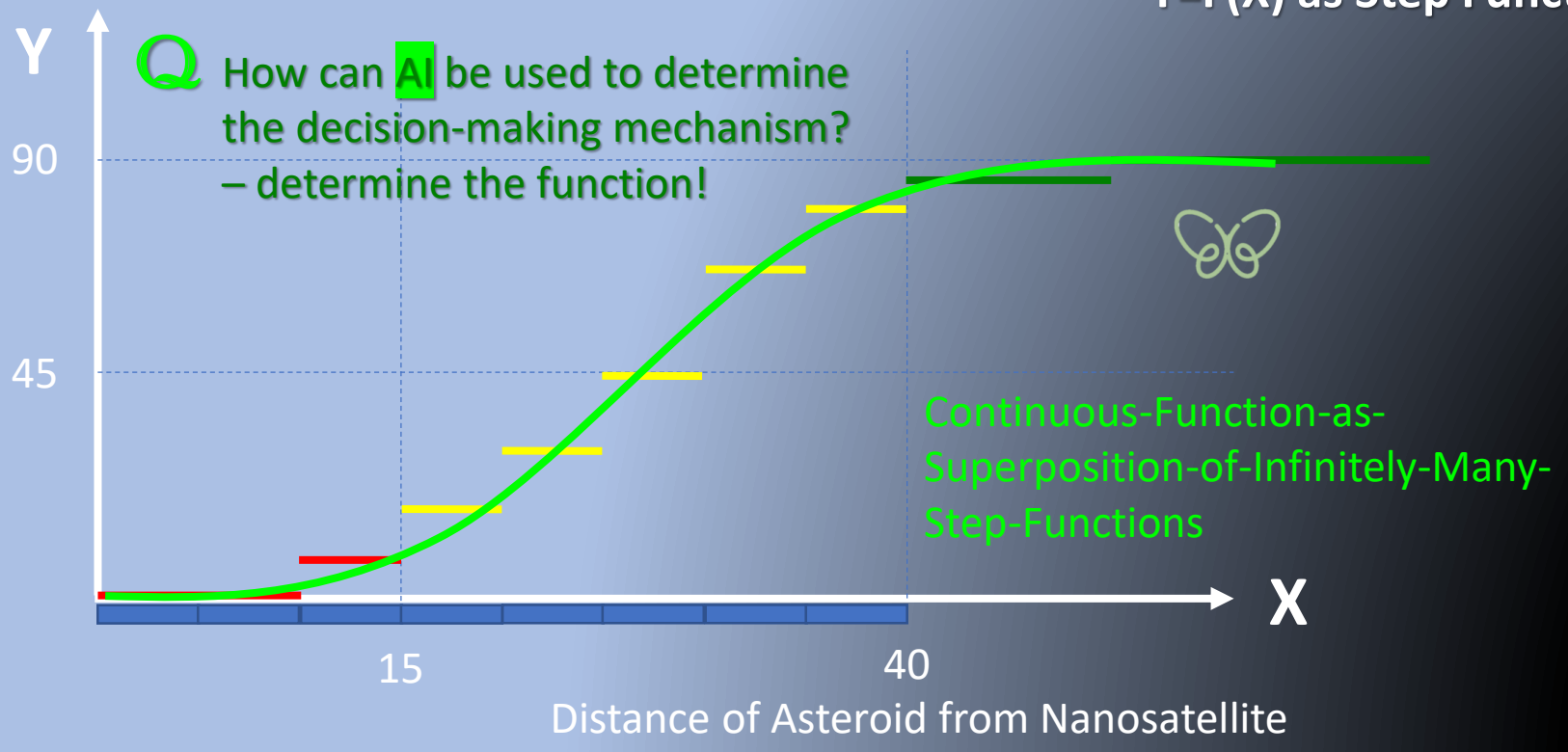

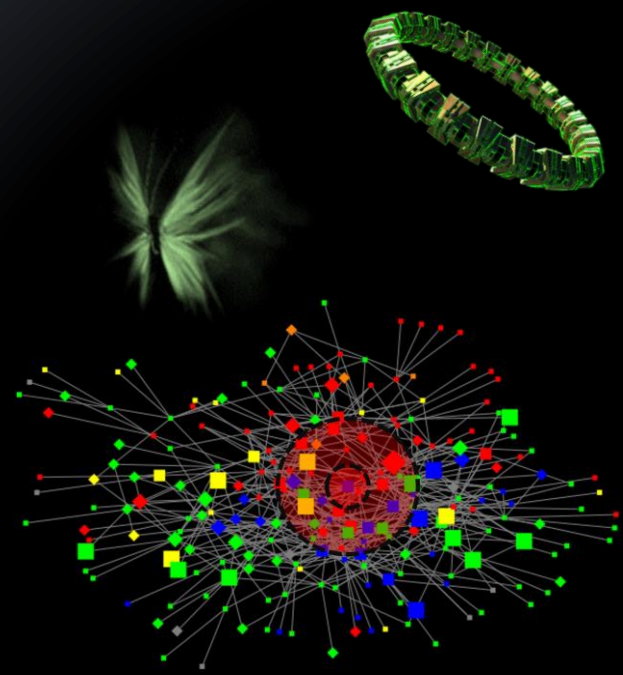

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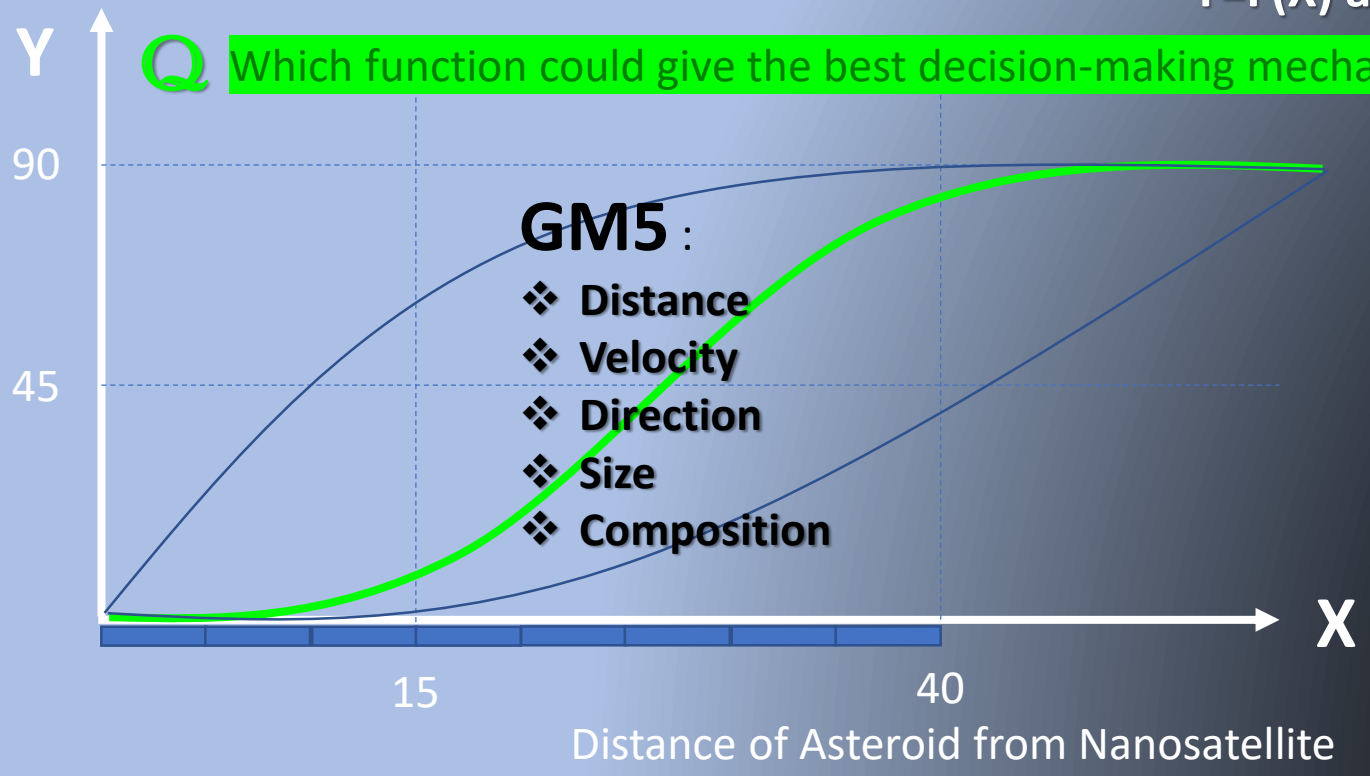

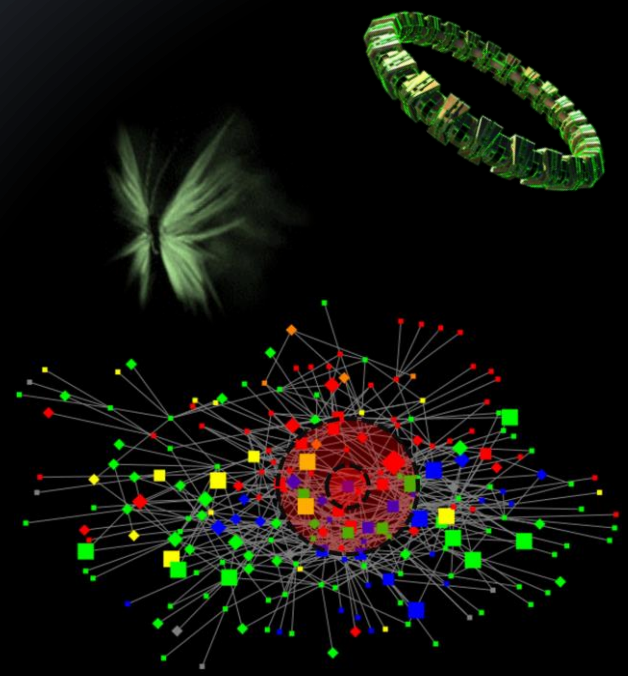

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Quantum Haar Wavelet Transforms and Their Applications

Darwin Gosal* and Wayne Lawton†
National University of Singapore, Singapore 119260

November 5, 2001

Fourier transform has been shown to be a powerful tool in many area of science. However, there is another class of unitary transforms, the wavelet transforms, which are as useful as the Fourier transform. Wavelet transforms are used to expose the multi-scale structure of a signal and very useful for image processing and data compression. In this paper, we construct quantum algorithms for Haar wavelet transforms and show its application in analyzing the multi-scale structure of the dynamical system by the Logistic Map ($x \rightarrow \lambda x(1-x)$), where λ takes value in the interval $[0, 4)$.

1 Introduction

Information is stored, transmitted and processed by physical means [1]. Thus, the concept of information and computation can be formulated in the context of a physical theory and the study of information requires experimentation. This sentence leads to non-trivial consequences in the world of quantum mechanics.

The field of quantum information science has undergone explosive activity over the past few years. This quantum information science has generated

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