Beats & Bytes: Fiddling with Your Evidence

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How It All Began:

Cindy

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Matt
Music is not math. It's science. You keep mixing the stuff up until it blows up on you, or it becomes this incredible potion.

~ Bruno Mars - Musician
“I would teach children **music**, physics, and philosophy; but most importantly music, for the patterns in music and all the arts are the keys to learning”
~ Plato - Philosopher (b. 428 BC)

Inspiration is hard to come by. You have to take it where you find it.
~ Bob Dylan - Musician & Philosopher
"The theory of relativity occurred to me by intuition, and **music** is the driving force behind this intuition. My parents had me study the violin from the time I was six. My new discovery is the result of musical perception."

~Albert Einstein - Physicist & Philosopher
“There is geometry in the humming of the strings, there is music in the spacing of the spheres.”
~ Pythagoras - Philosopher & Mathematician (b. 570 BC)

“Science cannot tell us a word about why music delights us, of why and how an old song can move us to tears.”
~ Erwin Schrödinger - Physicist
“If I were not a physicist, I would probably be a musician. I often think in music. I live my daydreams in music. I see my life in terms of music.  ~ Albert Einstein - Musician
“The latest version of String Theory is called M-Theory… What is physics? Physics is nothing but the laws of harmony that you can write on vibrating strings. What is chemistry? Chemistry is nothing but the melodies you can play on interacting vibrating strings. What is the universe? The universe is a symphony of vibrating strings... We now, for the first time in history have a candidate for the mind of God. It is, cosmic music resonating through 11 dimensional hyperspace.

We are nothing but melodies. We are nothing but cosmic music played out on vibrating strings and membranes, obeying the laws of physics, which is nothing but the laws of harmony of vibrating strings.”

~ Michio Kaku - Theoretical Physicist
“We’ve learned in the 20th century that the equations that work have inner harmony.”

~ Edward Witten - Theoretical Physicist

“I'm not saying I'm gonna change the world, but I guarantee that I will spark the brain that will change the world.”

~ Tupac Shakur - Musician
Heddy Lamarr - Actress and Co-inventor of Spread Spectrum Technology (Bluetooth, CDMA, WiFi)

Earliest version of frequency hopping used a piano roll to change between 88 frequencies and was intended to make radio-guided torpedoes harder for enemies to detect or jam. Her co-inventor was composer George Anthiel.
“Fractals are patterns which occur on many levels. This concept can be applied to any musical parameter. I make melodic fractals, where the pitches of a theme I dream up are used to determine a melodic shape on several levels, in space and time. I make rhythmic fractals, where a set of durations associated with a motive get stretched and compressed and maybe layered on top of each other. I make loudness fractals, where the characteristic loudness of a sound, its envelope shape, is found on several time scales. I even make fractals with the form of a piece, its instrumentation, density, range, and so on. Here I’ve separated the parameters of music, but in a real piece, all of these things are combined, so you might call it a fractal of fractals.”

~ Györgi Ligeti, Composer (including 2001: A Space Odyssey)
"Without music... I'd probably be in the rubber room. There's a great comfort in the music itself. It's a shame that everybody in life doesn't have something like that ... so that if they fail in business or get your heart broken ... you can still play your music. It helps get you through the darkest times. I hope on my deathbed that I'm learning a new chord or writing a new song."

~ Gregg Allman - Musician
It's conventional wisdom you should not send email when you are emotional or upset. Less well known, but equally valid, is that you should also hold off when you are listening to Poison.

~ Jesse Kornblum - DF/IR Forensicator
(“Talk Dirty to Me” was the song he was referring to.)
“Music has always been a matter of Energy to me, a question of Fuel. Sentimental people call it Inspiration, but what they really mean is Fuel. I have always needed Fuel. I am a serious consumer. On some nights I still believe that a car with the gas needle on empty can run about fifty more miles if you have the right music very loud on the radio.”
~ Hunter S. Thompson - Journalist
“Though I am often in the depths of misery, there is still calmness, pure harmony and music inside me. I see paintings or drawings in the poorest cottages, in the dirtiest corners. And my mind is driven towards these things with an irresistible momentum.”
~ Vincent van Gogh - Artist

“One good thing about music, when it hits you, you feel no pain.”
~ Bob Marley - Musician
“Music is the universal language of mankind.”
~ Henry Wadsworth Longfellow - Poet and Educator

“The role of the musician is to go from concept to full execution. Put another way, it's to go from understanding the content of something to really learning how to communicate it and make sure it's well-received and lives in somebody else.”
~ Yo-Yo Ma - Musician
“You are the **music** while the music lasts.”

~ T.S. Eliot - Poet, essayist, publisher, playwright, literary and social critic
So rock me momma like a wagon wheel
Rock me momma any way you feel
Hey, momma rock me
Rock me momma like the wind and the rain
Rock me momma like a south bound train
Hey, momma rock me