

A photograph of a sunset through a forest of bare trees. The sky is a mix of orange, red, and blue. In the foreground, there is a white fence and a small lantern on a post. The trees are dark and silhouetted against the bright sky.

Carmel of the Stars

Photograph taken on 15 December 2007, "At Dawn," by David Mahler

Carmel of the Stars...

31 December 2007 into 1 January 2008

The 1-year anniversary of **LAST WORLD STANDING:**

Treatise on Light from the Dark Matter.

Intro to the new beginning...

My name is David Mahler. Scientist.

The day began as always, a *Science Super Smoothie* (S3) for the two boys, Lance, six and Dominic, two. I'm on my laptop, sitting in the YMCA lobby watching the boys swim. I should be continuing my 33-years ongoing investigation of the *Alpha-Probis Star Cluster*, but my Mr. Mom genes, no doubt a gift of *Carmel*, have kicked in.

Carmel.

On **14 December 2006**, I observed one of the brightest, bluest, longest burning meteors of my career as an astronomer. Its trace was unusually visible. It burned for such distance and duration, I thought surely it was something else. A crashing plane. A missile perhaps. At that very moment of spectacle, we had just parked near a church where Lance was studying Suzuki violin. I called to Lance. "*Quick, get out of the car! Look at this!*"

I know. Not at all the cool, collected declarations a normal person would expect from a member of the *scientific* community.

On **16 December 2006**, the anniversary of the *Battle of the Bulge* and the birthday of *Ludwig van Beethoven*, and one day before the anniversary of the Wright Brothers' 12-second first flight, I traveled to Chicago, via Indianapolis. Each year I am laid waste to the nausea of anxiety brought forth by the annual pseudo-astronomers convention. Since 1994, each Christmas season has been surgically severed by a critical mass of pseudo-scientists measuring, it seems, *one-per-every-square-meter* of convention space in the basement of the Chicago Hilton Towers. The event is a yearly reminder of why I have chosen a reclusive life amidst a contemplative retreat in the distant hinterlands of Southern Virginia... near my work site and NASA.

When my engineering friend and computer confident, *Antone of Indy*, gathered me up at the airport, he told me of his recent move to *Carmel*, Indiana. In his new garage, Antone of Indy graciously kept the apparatus used at the *STARWorks®* exhibition booth over the past 13 years. Stalwart and loyal, Antone of Indy, harbored no love for the pseudo-astronomers of "Middle-West" as it is called. He gave me a hug when we met at the Indianapolis baggage claim.

"Antone, you haven't gone *artist* on me now have you?"

He spoke in typical understatement. "I was simply rehearsing a Heimlich Maneuver in the event that your first bite of Ruth's Chris is too large."

"Indeed," I said with a quick lick of the chops. "Let us be off!"

The ride to our new destination, Antone's home in Carmel, was filled with diverse, always connected discussion.

1. Our side-job passions for Veterans.
2. Antone with the USS Indianapolis Survivors.
3. Me with the Bataan/Corregidor Survivors.
4. The use of Enbrel to treat psoriasis.
5. Drug companies.
6. The Global Warming debacle.
7. Greed.
8. Bureaucracy.
9. Politics.
10. The coming storm of the "Middle-West".
11. New computer software to photograph astronomical wonders such as the Triffids:
(see photo right.)

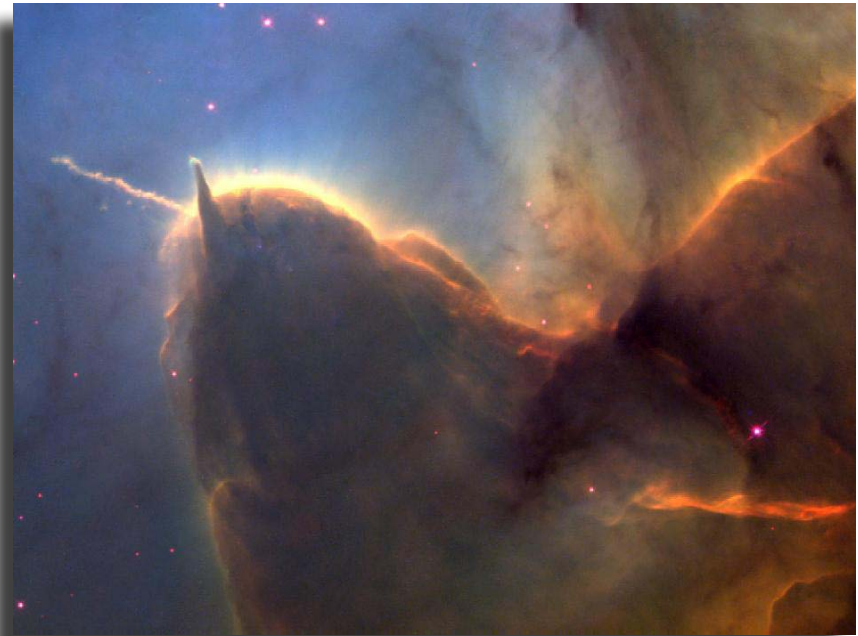
“So you moved to Carmel, huh? That’s my Mother’s name, you know?”

“Indeed. It’s a nice town, small, conservative, nice Sushi bar, a nearby Ruth’s Chris.. *and* it’s at exit 33!”

“Another promising SYNC. Antone, I don’t now if I had told you this, or if I had sent it to you in an email, but... on the **14th**, I saw one of the most *brilliant* meteors I have ever seen!”

While we drove through the dusting snow, I recounted the experience in explicit, dramatic detail. Surely, my delivery would have repulsed the pseudo-astronomer elites soon to be hobnobbing and grazing like baaing sheep. Yet, this was what awaited us in Chicago... herds of conformists, spending precious time away from their families at Christmas.

Antone spoke in his usual calm. “I have a friend. He reminds me of you. His mother passed away this week. I bought him a sympathy card from this new shop in Carmel. On the front of the card was an etching of a meteor, a shooting star, and inside was the text, *‘When you look up at the stars tonight, think of them as porch lights welcoming your Loved One home.’* Something about that card reminded me of you.”



When we arrived at his new home in Carmel, the two of us stood in his spotless kitchen, all too aware of the fact that time was short. We had only 2 days to pack and purchase and plan and preempt before submerging ourselves in the muck of the Middle-West. I reactivated my cell phone. *There were several messages waiting.*

“Dave, this is Robert. Call when you can.”

“Dave, this is Markus. We need you to call when you get in.”

“Davo, this is Nigel. Do you have a key to Mommy’s?”

“David, this is Dad. Your Mother passed away. Sorry.”

I remember my head hitting the new marble countertop in Antone’s kitchen. “Oh, no... No. It can’t be...”

Carmel Mahler was far too young. In love at 17, married at 21, was she to miss her first born’s 49th birthday? Carmel was too good and too young to leave us this soon... and why now, before *Christmas, with her Gifts to us and the kids still on her kitchen table?*

I had never removed my coat. Stunned, but purpose-laden, I got onto the internet and arranged a flight to Connecticut. Directives were sent to my family in Virginia, and the process of dealing with untimely death began.

In flight, I wrote a *Tribute to Carmel*. I would read it in the Church of her baptism on the day of her burial. Here now, are *excerpts* from that reading composed on **16 December 2006**:

On Thursday night, December 14th, I looked up into a crystalline night sky and saw one of the most beautiful, bright and long-burning meteors I had ever seen. At first, I thought it was a crashing plane, then... a firework. Then, I saw it for what it was, an ice-blue shooting star, first burning white and then in one final spiraling gasp, becoming a bright moving candle that shed its radiant light... one last time.

Meteors, shooting stars, especially around Christmas are Signs. Miniature “Stars of the East” that remind me to feel Hope. There’s something good in seeing one... I think you know what I mean? The Stars are always there, but every once in a while we must be shaken from complacency. Suddenly, we see that fast-burner, that **MOVING** Star... and it seems to tell us, “*You’ve forgotten the skies for too long. Look up! Look up!*”

Two days later, when I was told that Mommy passed forward, just minutes after arriving in... yes... CARMEL, Indiana, I thought of *that* meteor... for whatever reason it may have been. I could never tell you why *this* synapse fired *that* neuron and caused such-and-such a correlation... *but there it was...* the thought of Mommy... **joined** with the thought of that bright-burning, joyous, life-celebrating, shining-in-defiance-of-the-darkness Shooting Star.

My Mother's Life is marked by... **Life!** She was filled with trouble-denying Joy and all she ever gave other people was Goodness. *Everyone* became her child. Only Compassion flowed in her words and her Action. She prayed for her enemies, encouraged us to do the same, and when you needed help, she would simply say... *Say a prayer.*

My Mother lived by a code of conduct that is rare to find these days. She did what she thought was right in spite of many pressures not many of us will come to understand. She was divorced on paper but never relinquished what **SHE** felt and believed was her responsibility as the Mother of 4 boys. Yes, she lived by a Code... a Code of Honour, and she lived through many a redundant, lonely moment... often times *without* the support of her family who wanted her to live in ways that were contrary to her beliefs. In her unassuming, always bubbly, often behind-the-scenes way, she was a Hero.

She had Integrity. That was her Strength. That was her Gift.

On 16 December 2006, our Mother fell asleep watching TV. (*I believe it was much earlier...*)

The Goodness that was my Mother, *our* Mother lives in all of us who have known her. She is alive in us like the memory of a Shooting Star that appeared briefly from the Darkness. It burned long and bright, giving its Light to all who would simply look up... and *see* it.

And like the Shooting Star, Carmel Poggione Mahler is consumed by the very Light she gave to others. *We* are left with a smoky wisp, a once fiery trail, a memory, a painful hole and a further *test* of Goodness. But this day, this night and into forever and especially at Christmas, the *Heavens* are more bright than they have ever been before.

Here is Antone's email message from 17 December 2006:

Dude... what are the odds that you would have been in **CARMEL** Indiana when this happened? GOD certainly is everywhere and in everything.

Here is the note I included with the card I just sent to you and your brothers. The card reads... **“When you look up at the stars tonight, think of them as porch lights welcoming your Loved One home.”** I didn't look at the card until after I picked it up and **THEN** remembered I had sent that same card to Mike just a few weeks ago. **WE** were just talking about **HIM** as we left that night... for **CARMEL**.

Dear Steve,

Words usually fail me, especially in these situations. It seems like the vocabulary is limited to a few clichés like *sorry*, *condolence*, *sympathy*. I guess Mahler said he wouldn't write Music if he could say it with words, right?

I know that your Mother's passing is difficult because she was such a Blessing. It is always hardest to part... even temporarily... with the best things. Makes me think of how difficult it is for Lancer every time you leave for a trip because you are such a good father and because he loves you so much. He cries... even though he knows he will see you again soon. But what a lucky kid!

After dropping you off at the airport this morning, I stopped by Target to buy a card. Without reading it first, this is the card I picked up. Last night, as we walked past this very card... in the town sharing your Mother's name, and before you had heard about your Mother's passing... we talked of kindness and I told you about a man whose kindness reminded me so much of you. Just a few weeks ago he lost his Mother, and as soon as I read this card I remembered that I had sent the same card to him.

What are the odds? The meteor? The one you saw and the one on the cover of the card!? Our talks of kindness and the two of you? Both of your Mothers passing? This very card showing up twice? I bet your Mother is laughing right now!
All my Love and Friendship,

On **20 December 2006**, we buried her. From Stardust to Stardust. It wasn't until **3 AM on the 28th** that it hit me. Carmel was gone. There was no longer a Mother to whom I could turn.

She knew things no one else did. Private things. Things I could never write. Though I still have her number in my cell-phone-contacts list, suddenly, she was no longer reachable by phone... only by Prayer.

On the **22nd**, we "celebrated" Robert's birthday. On the **23rd**, mine. On Christmas Eve and then on a strange, half-empty Christmas of 2006 we spent quiet times in Connecticut with my Brothers.

Here now is part of the back-story:

Between the four of us, no decision regarding the funeral took more than **30 seconds**. Flowers? Done. Mass Cards? Done. Food? Done. No matter what it was, we moved like four independent voices in a fugue by Bach. Each melody was separate, yet joined in one over-arching, integrate Harmony.

We did take almost 3 full minutes to decide upon the casket, but that's because there were many good choices. All of us had distinctly remembered our Mother saying, ***"Please don't put me into the ground. I want to be in the mausoleum."***

With the same rapid-fire, fluid decision-making, we visited the mausoleum at St. Mary's Cemetery and chose a spot where Carmel would be placed into the wall. Nigel's cell-phone rang. It was our cousin Marion, so named because she was born in a "Marion" year, that is, an iteration of **33** years.

She asked to speak with me. "David, I don't mean to add more confusion, hon', but you know we have the deed to the plot where your Grandfather is buried and there is an open spot right next to him. I'm sure your Mom would like to be buried next to her Father. I..."

"Marion, it is most interesting that you would choose *this* moment to call. I'll call you right back!"

There was no need to further waste words or time. I asked the cemetery curator if my brothers and I could have a moment. I explained to my Brothers about the deed and the plot and Marion's call with scientific calm, clarity, and typical pragmatism. I told my brothers that we needed to visit the plot.

"It's nestled at the highest point on the grounds," I told them. "When Grandpa Leonard was buried there, all I could do was look up. The sky was peaceful and a brilliant radiant blue. The wind was soft like a Mother's whisper."

I knew that his cherished, missed Life was no longer in his body or in the ground. I looked up to the heavens, into an Infinity I usually studied through telescopes and special equipment because I knew beyond device or measure that he had become a part of the Universe above us and infinitely around us and inside of us.

We soberly drove to that spot atop the grounds. As if some force had simultaneously released four pins from four emotion-grenades, the four of us scattered to separate, isolated spots. We would cry alone. Four brothers, but four men. All of us had become overtaken by the hollowness and the tears we had so long suppressed. We could almost hear Carmel's voice, a whisper in the wind. In that same hauntingly blue sky, I had remembered when my Grandfather passed away some 20 years ago, we could hear our Mother say, ***"It's okay. When I told you about being buried in the ground, I was in your world and had your fears. Now, I am with my Father again, and yes... we are on a journey to God. I will always love you. Please, please put my body next to my Father's. It's okay. Goodbye, for now, my four beautiful sons."***

The infinity took less than 5 minutes. All was decided. We called the funeral home. We changed the casket type to one that could be placed into the ground... and when finally we buried her on 20 December 2006, all the many flowers offered to her from her many friends were white, save for *eight*. The eight red roses were placed on her grave by her Grandchildren.

As we drove away, my brothers eased their sorrow with humor and joked about the recurrences of the number 33. "Some scientist you are", they joked. Then we passed by the office of the Doctor who had delivered me on 23 December 1957. "That's Dr. Duncan's office," said my Father matter-of-factly. The address was **#33**.

As executor of Carmel's will, I gained access to her personal records, photographs not even she had seen or even developed, and stored treasures that enabled me to relive her brief life. During the process, Lance and I were watching **CARS**. In one scene, the Hudson Ford name "Doc" talks about his 3 Piston-cup trophies from 1951, 1952 and 1953. At that very moment, I was studying Carmel's High School yearbooks from 1951, 1952 and 1953. Under her final yearbook picture, she writes her Life's goal: "*To love and to be loved.*"

I created a photo-journal memento of her all-too-brief Life and shared everything with my Brothers and their families. In her telephone records, I could see that the last call she had made was on **14 December 2006 at about 5:33 PM**.

Could it be? Did Carmel, in fact, leave us on that *same* night... at about the *same* time that I had seen the Shooting Star?

A year passes.

On the morning of **13 December 2007**, I received news of the coming Geminid Meteor Shower scheduled for 13 and 14 December. How ironic I thought. Exactly a year, and here again, almost as if on cue, came the possibility of yet another encounter with the Infinite. Was I to see another shooting star, a reminder of Carmel?

On the 13th, I proceeded outside in lofty, and not-at-all-scientific anticipation of what I might see. Perhaps another message from my Mom. Yes, a message from Carmel of the Stars?

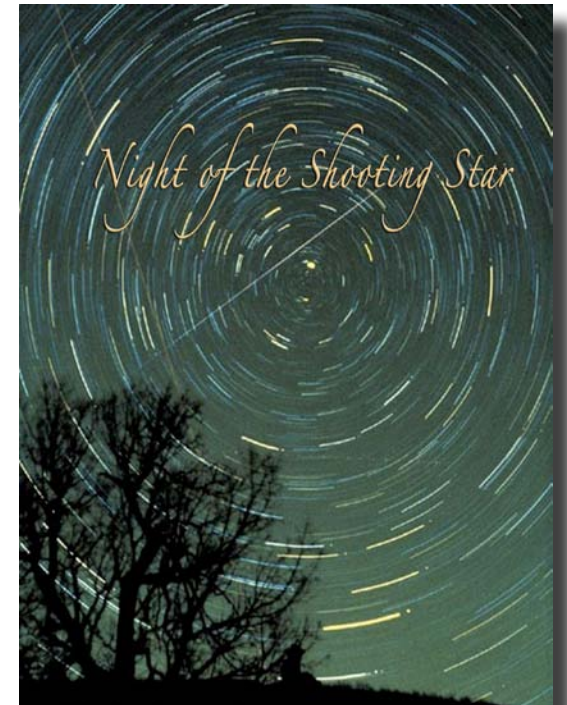
But the skies were obscured by heavy cloud cover.

Oh well, there would be another night, I thought. Perhaps tomorrow on the 14th, on the one year anniversary the skies would be clear.



On the **14th**, I once again ventured outside. Thick clouds lingered, still. I knew that behind those "Veils of the Stars" and somewhere out of short, frustrating sight, a feast of celestial wonder danced above. The clouds prevented any merging with the Stars. Only my imagination joined in the Dance.

The **16th** was approaching, and once again, I would be flying to Indiana, there to be picked up at the airport by Antone of Indy and driven to his home in Carmel. It was a chilling anniversary, one I did not want to relive. There were too many overlaps and SYNCS and reminders. I thought it best to check in with Antone, so I went outside to make the call. It was **14 December** at approximately the same time when just one year earlier I had seen the marvelous glowing orb of the spectacular shooting star.



"Antone, what's up, man?"

"Oh... just another sojourn into the dark-side."

"Oh, man, I'm sorry. Were it not for you, I wouldn't even go to this bloody thing year after year. You've been the most loyal of all my friends... and I thank you for suffering *with* me. Well.... you know what? I just finished an essay early this morning at 3:33 AM, another treatise for our friends at the Middle-West to laugh at. It's called, *Night of the Shooting Star*."

"Yeah? What's it about?"

“Something at the heart of all Science, Antone... **Faith**. Faith in the wonder that compels us to it, faith in the unseen soon to be seen, faith in our own abilities as creatures of the Universe to discover that Universe and not only live in it but *thrive* in it, *revel* in it, inhale and exhale its wonder in awe.”

“Can’t wait to see it....”

At that moment, the clouds temporarily parted and in the same, now visible sector of the night sky I had observed exactly one year ago, and at approximately the same altitude and at the same moment on humanity’s superimposed 24-hour clock, I saw the largest, longest burning, brightest blue, magnificent and spectacular shooting star. It burned in a 90-degree arc, splitting the star-laden darkness.

“Ooh! Ooh! Antone! I saw it! I saw the shooting star! **HER** shooting star! It looked exactly the same!”

Antone was silent and seemed to understand. I had written the essay, *Night of the Shooting Star*, only to realize that I had written it on the same morning of the very Night I was once again to see... **the** Shooting Star. It was as if the work was not only a reminder of the past but a predictor of the *all-too-soon* future. I was caught up in the “magic” of the moment. No longer a scientist, I went inside as a Father and as a Son to get Lancer.

Excited, I shook him. It was too late. He was asleep.

When I returned outside to seek more wonders of the night, the clouds had returned. Whatever dance there *might have been*, it was hidden, now swirling behind an impenetrable veil of clouds. I wanted to see more shooting stars! But the clouds were thick and indifferent. No stars could shine through. I called Antone. What he said brought chills.

“Antone, that Shooting Star... that one moment of clear skies... that synchronicity of events happening exactly one year to the date I believe my Mother passed... tied to the phone record and to the one-year memento piece, *Night of the Shooting Star*. Wow! It all seems... well, not at all like cold, hard, empirical science does it?”

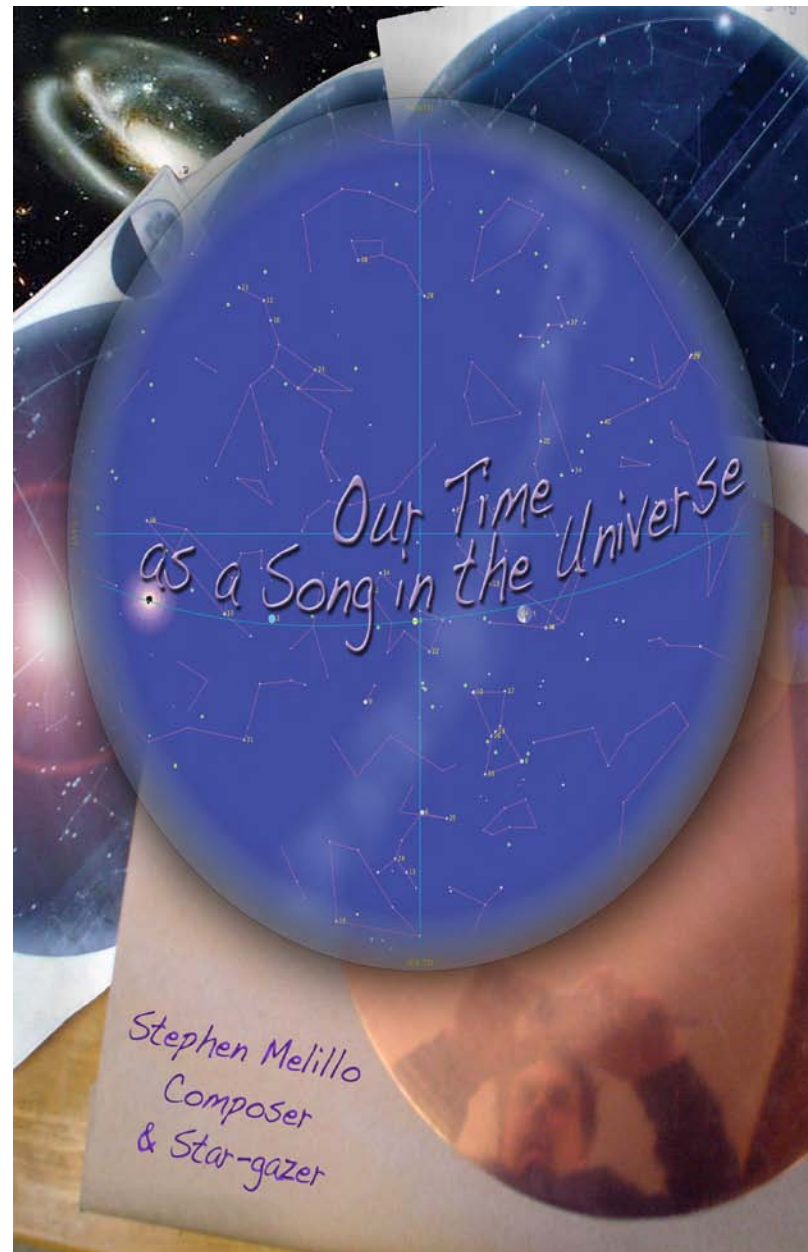
“And think of this,” said my otherwise pragmatic, engineer friend. *That* shooting star? ... that you would see it just *then*, in *that* sky at *that* time, in *that* way. It’s like your earlier essay, *The Star Thrower*, only **this** star was thrown **billions of years** before any of us were here to know that such things even existed. It was thrown for you... *then*. Billions of years ago.”

The chill that chiseled through me, carving a new Soul just in time for my 2nd one-half century, was one that I had never experienced. The Chisel-Chill was a conduit to the Infinite. Antone and I both felt it.

On **13 March 2007**, the day Carmel’s Mother, Madeline was buried in that very same plot at Saint Mary’s in Port Chester, New York, we sold our Mother’s condo. The number of **SYNCS** swirling around that date are too numerous for this one brief story.

Confined by Time, I will briefly share only the following:

I had, on 13 March 2007 also completed an on-going 33-year experiment called ***OUR TIME AS A SONG in the UNIVERSE***. Having dabbled in the musical arts, I set out to record the “Music” made by the star positions as mapped across the celestial plane over New York City at the specific time of **8:18:18 AM on 11 September 2001**. At this very moment, Lancer Mahler was born. This interesting musical recording and the compositional process became the addendum to my treatise on **new life** entitled **CHAPTER 13: WHISPERS on the WIND**. The process is briefly described below. So as not to be confused, I am using the pen name, *Stephen Melillo*, and Lancer is referred to as *Spencer*.



OUR TIME as a SONG in the UNIVERSE

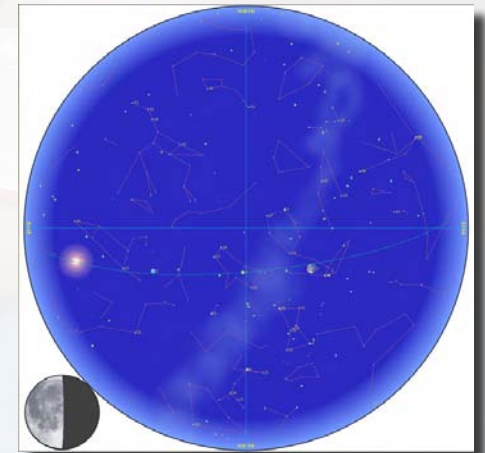
an Idea in Music by © Stephen Melillo IGNA, first in 1974...
Then created as a Porter Music Box Disc on 1 February 2006
and then Composed on 19 April 2007



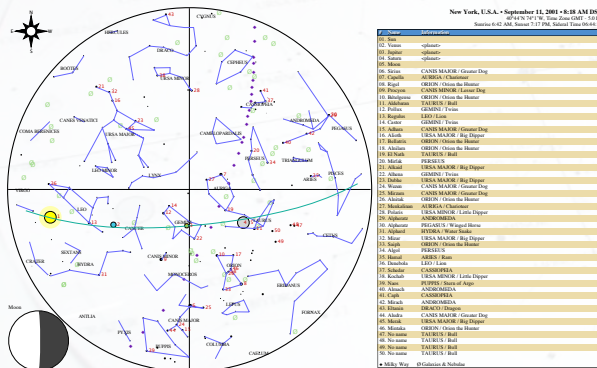
OUR TIME as a SONG in the UNIVERSE was *composed* long before any of us were Born. And it will continue to play long after any of us, or any of our greatest of great grandchildren will be around to hear it.

Premise from 1974: Did you ever look up at the night sky and wonder what Song the *Universe* played? Not the one you imagine in response to the Infinite, but the one as determined by the position of the Stars? Locked into that “position” is a coded, mathematical message. What does it *sound* like? How does one translate the positions into... “Music”?

Many years ago while visiting the Natural Bridge in Virginia, I came upon a **Porter Music Box**. This very large, wonderful sounding music box uses 15.5-inch diameter disks like the one pictured to the left. These disks are punched by means of a special template. The resultant protrusions pluck times much in the same way a bumpy roll plays a smaller, more common music box. At the moment of “seeing” **The Porter Music Box** and its circular disk, I *instantly* knew how to go about hearing the “*Song in the Universe*”... a “plot” which I had imagined since 1974. Interestingly enough, 1974 was the very time that **The Porter Music Box Company** went into Business!!! I call this, “**SYNC**”. When they sent me a letter with a **30-year-anniversary** sticker on it, during the *same* Time I was writing about the **30-year** process of *Stormworks*, I knew that something special was soon to unfold!



I had developed a kind of tripod that I called a “**Star-gazer**” back in high school days. This was before the days of computer images. **IF** one could take a photograph of the **celestial sphere**, interpolated as a **celestial plane**, and then inscribe the position of the Stars as “punches” on the disk, what “**Music**” would be played? If that doesn’t pique your curiosity, I doubt anything will! Remember that scientists from Pythagoras to Kepler wondered such things!



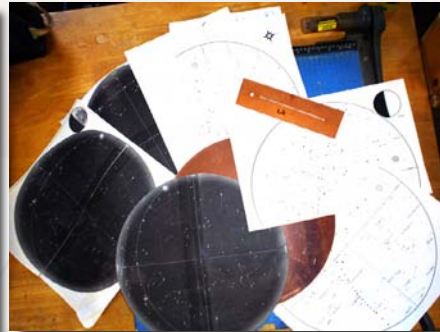
There are **MANY** possibilities, but if there was “order” in The Stars, it would reveal itself in any snapshot. With that hypothesis in place and with that understanding of order within order, I chose a **celestial sphere**. Which one might you have chosen? There are *many* possibilities. But on the Great Cosmic Stage, these would produce little differences. **IF** there was a Song to be heard, it was most likely an **Eternal Song** with little, albeit interesting variations. For the date of the ecliptic plane, **11 September 2001 at 8:18:18 AM over New York City** was chosen. At that moment Spencer Melillo was born. There are other reasons, **Storm** reasons... why this date was chosen. Those reasons are connected to the complete body of work called “**Stormworks**”.

What follows now is a **record**, a documentation of the process in words and photographs. It is offered as a means of inviting you the Conductor, the Musician, and the Listener into the *Universe* of this **Eternal Song**. Had the technology existed in the Time of Bach or Mahler, I am quite sure that they too, would have conducted this experiment. In that Light, I do this for *them... now*.

Godspeed! Stephen Melillo

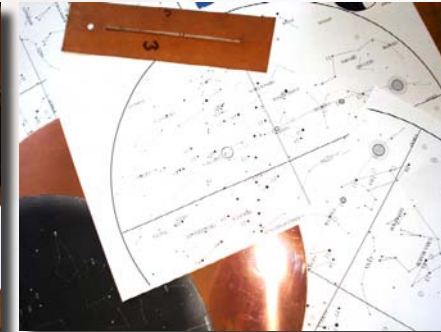


I am compelled to record this. As I moved all of these items into the garage on 1 February 2006, the very first thing which caught my eye was the number **33** in the photo of the chosen **celestial sphere**. This is an interesting SYNC. I include this photograph for personal reasons.



By means of measurement, image capture, printing at different percentages and then finally by tiling an exact-to-scale print as called for by the diameter of the *Porter Music Box Disk*, the final needed pages for plotting the Stars were printed.

Exciting!



Though indeed it would be interesting to hear each and every Star and Planet regardless of its *magnitude*, the *Porter Music Box* must follow a specific Tines-Template of possible *punches*. I had written a series of letters to Jim Sault at *Porter Music Box Company* beginning in 2003. Jim sent me not only a Disk, but also the Tines-Template to assure accuracy in designing a plot which was playable.



The first scaled image I experimented with was the **white-on-black** version as seen above. Originally, my intent was to puncture the white dots and leave a small mark on the Disk. Later I would embolden the marks, send the Disk to Jim Sault and have him punch out those specific moments. The Stars chosen were based on a *magnitude* which made them visible to the naked eye.



The Tines-Template is the device seen at the right. It has the numbers 3 and 3 on it. It has the same fulcrum as the Disk and is designed to spin around the Disk in the manner of a compass.



Here is a photograph of the printed **celestial sphere** from **11 September 2001** scaled to the 15.5 inch Disk-size.



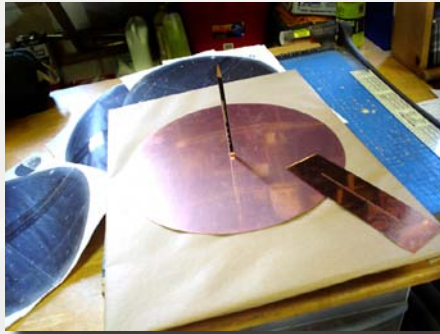
This photograph shows the Disk sent by Jim Sault of *Porter Music Box Company*. Many thanks to Jim and his Company for his patience and support during this project!



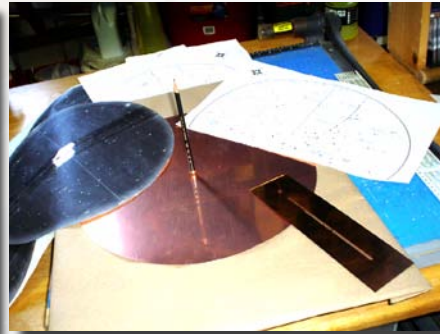
Here is another photograph of the Disk... this time with a captured self-portrait during the process!

1 February 2006, morning.

And many thanks to *The Christmas Attic* in Alexandria, Virginia. It was there I eventually recorded the Star Disc on 13-14 March 2007.

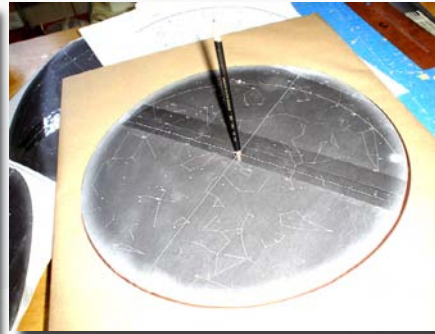


Here is a photograph of the preparation process and the 2 items sent to me by *Porter Music Box Company*. The Disk and the Tines-Template.



More prep. More "setting-up".

The Tines-Template by the way allows for 2 octaves of chromatic possibility across the Disk. All of the Stars and Planets at the selected magnitude fell into those very fine positions! (*That alone is fascinating!*)

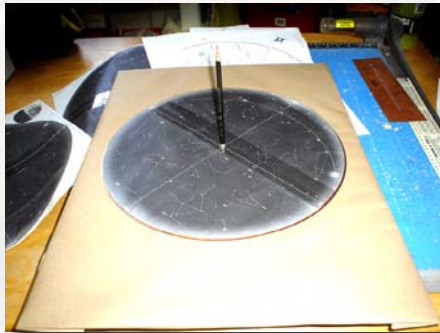


Here, the chosen **celestial sphere** photograph is carefully positioned onto the Disk.

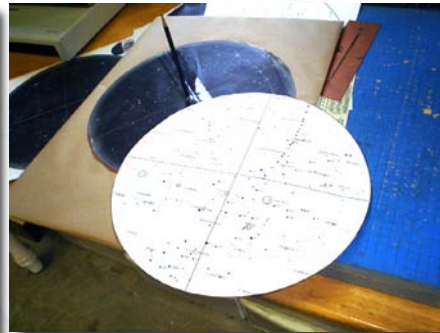


Everything has been arranged, printed, and plotted so as to allow for a consistent correlation between the Stars... and the *Porter Music Box!*

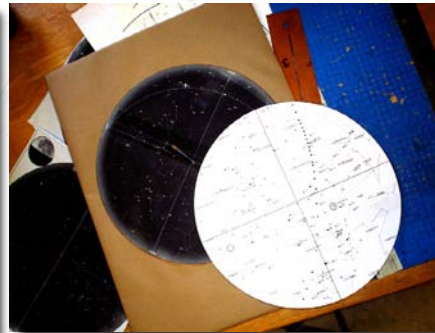
*What an AD for The Porter Music Box Company, and The Christmas Attic!
8 -)!*



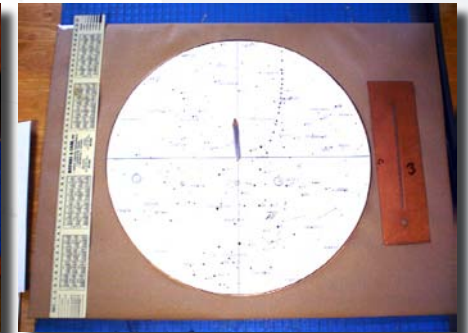
Here is another photograph of this step. This photograph was taken by Spencer! How could I say no? And it's a nice photo!



Because it was difficult to see the tiny white dots through the small holes of the Tines-Template, I created an inverse image of the **celestial sphere**... an idea for whom I have Father Peter M. Rinaldi to thank! (*See the Holy Shroud of Turin. Also see Escape from Plato's Cave and Wait of the World. Did you know that the Shroud of Turin is present in the Artwork?*)

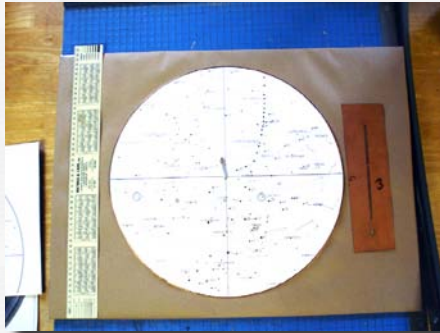


Later, I used a new printout of the **celestial sphere** as made available via computer by *MacAstronomica*, a star-gazing program that mirrors the night sky on a laptop screen.

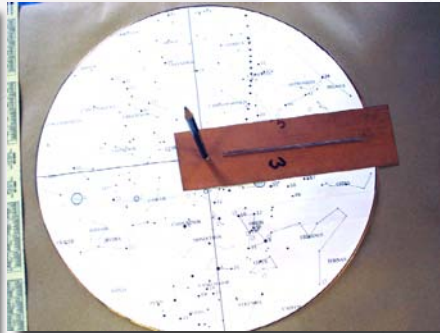


Now, using the new *MacAstronomica's* celestial snapshot, I went back to the "drawing board" as it were, and reprinted, resized, recut and then repositioned the new **black-on-white celestial sphere**.

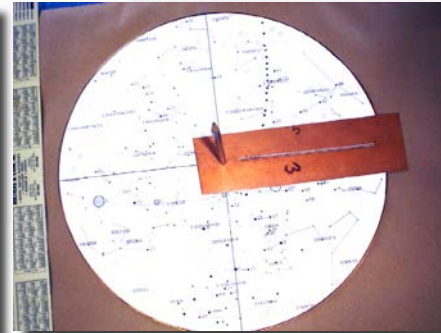
Spence wanted to do some cutting himself, so multiple copies were made!



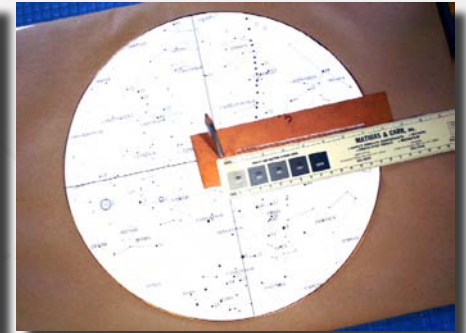
Here is a photograph of the set-up right before the "marking process". Everything, including the layers of paper, the Disk, the background brown paper, all are mounted on a kind of foam board.



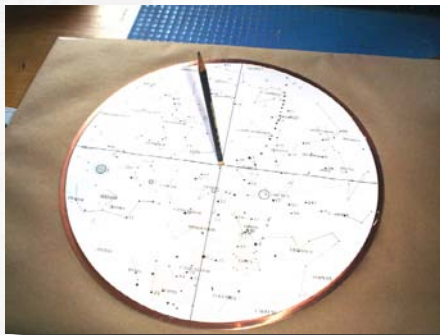
Here, the Tines-Template is carefully positioned onto the **black-on-white celestial sphere**. It will now be rotated. Through the tiny rectangular slots or holes in the Tines-Template, Star positions can be seen and then marked. These Star positions will be **playable** on the *Porter Music Box*. **WOW!**



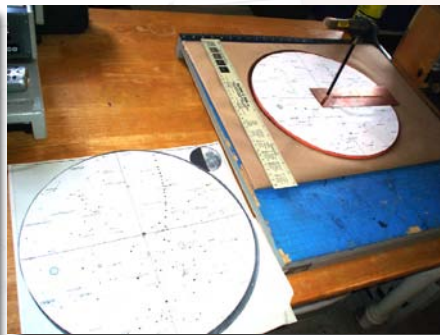
In the manner of a compass, the Tines-Template is carefully, slowly spun around a controlled center point, common to all Disks and graphics.



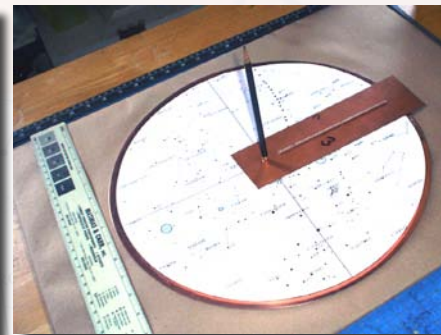
Through the tiny holes of the Tines-Template, and using careful measurement, the Stars will be punctured through two layers of paper and into the foam board.



But first, all positioning must be accurately controlled, and the Stars have to fall within the radius-range of the Tines-Template. The difference between THIS photograph and the one prior, is that now you can see almost 1/2 an inch of the Disk. To meet the needs of the Tines-Template, the entire **celestial sphere** needed to be scaled down and then reprinted.



Final measurements are once again taken.



Now, it is time to spin the Tines-Template around the common axis... and painstakingly perforate the Star locations through the brown paper and into the foam board that is beneath the set-up.



One of the Inspirations for this Piece looks on. Yes, Spencer Melillo is shown here looking at the "sky" as it was at the very moment of his birth... 8:18:18 on 11 September 2001.



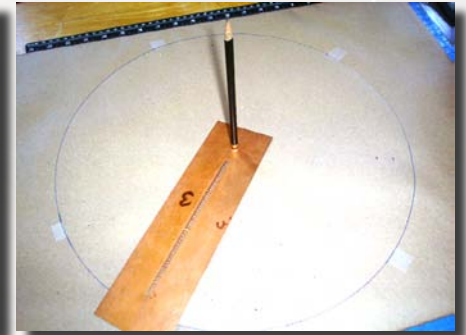
Here is a photograph of the **celestial sphere** after it has been perforated.



Removing the **black-on-white celestial sphere**, we are left with the perforated brown construction paper. These represent, literally **pinpoint** Star Locations.



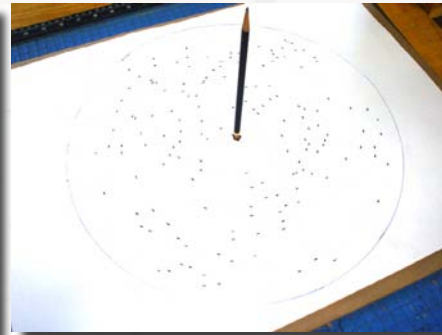
This new perforated "paper disk" will now be cut out and then repositioned over a piece of blank white paper.



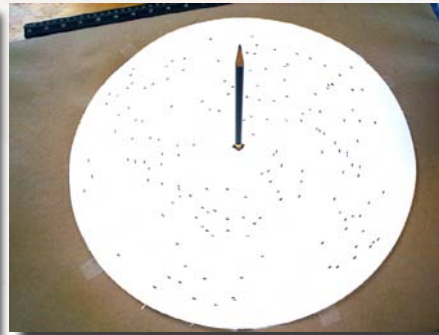
In this step, each tiny dot will be touched by a fine point Sharpie. The new dot will appear on a non-perforated white piece of prepositioned paper.



Once the white paper has been inked, the Tines-Template is then once again... painstakingly rotated over the dots. This time, the Sharpie is used to fill in the exact **rectangular dimensions** for the punch on each occurrence.



Using this approach and the Tines-Template, the marks are guaranteed to coincide with the *Porter Music Box's* Tine Positions. In this photograph, we are now **looking** at the Music! **Chills!**



The **new** Template for the "SONG" is cut. It is carefully lifted from the cutting board, left unfolded and then...



...packaged and sent to *The Porter Music Box Company*. What will these **"dots/punches/Stars"** produce? Will it be recognizable as... "Song"? Or will it become the backdrop Inspiration to a New Song?

Only Time & Fate will tell....
And now to the **present!**

On **16 December 2007**, I was once again in Carmel, Indiana. We relived the now *one-year past phone call*, the kitchen counter, the story of the card with the meteor on it. Life was strange then. It was stranger now. We focused on the good, on the smiling sky, on the ice-laden branches lit by the waning sun.



On **20 December**, after a few days with the many pseudo-scientists content to find the softest part of the wood and drill holes where everyone else had drilled holes and where drilling was easiest, we found ourselves at *Fogo de Chiao*s, a very nice Brazilian steak-house. We decided that it was best to salute my Mother in private. Antone and I,

two mathematicians in love with the elegance of numbers and the enormity of synchronicities and recursions and loops and quantum-foams and M-theories toasted *Carmel of the Stars*. Though we ate more completely and deliciously than we had done in the past year, the underlying ostinato of sadness loomed pale, beneath the evening, and without refrain.

At the end of the meal, a waiter strolled by with a cart of liquors and after-dinner drinks. Normally, I would dismiss the offer. Antone and I are not prone to drinking. There was a bottle of *Poggione Grappa* that captured me for some reason. I told the waiter we might be interested in a grappa. There were three bottles of grappa. The waiter delivered his well-practiced script for each. When he got to the *Poggione*, he said, “... and this has a rounded flavor, aged in a wooden barrel for several years... with just a *hint* of Carmel.”



“What was that last thing you just said?”

“... with just a *hint* of Carmel.”

**With Internet Connection Active,
Jump now to Poggione Film MVI-3344**

I asked him to run his script again and this time I filmed it... as a lasting record. (*Please see Mahler family DVD December 2007.*) I later discovered that *Poggione* is a vineyard and estate in San Angelo in Tuscany.... the area from which Carmel's Grandparents had come. It would seem that there are no accidents.

The drink was transparent, clear, and strong. My bottom lip became the fulcrum on which the attractive, short-stemmed glass rested and was levered upward. In that moment, at that mathematical point where drink and lip met, where and when the drink was inhaled and infused, its heat adjoined to my own, it was as if I heard my Mother laughing... her radiant smile now filling the already jovial room.



And suddenly, like the drink itself, all became transparent. Clear. Strong. My mind was ablaze with new ideas and possible projects.

On the 21st, we celebrated my 50th Birthday at *Ruth's Chris Chicago* in the same room where 10 years prior we had enjoyed a dinner with the famous Dutch Astronomers, Maurice Hamers and Ap van Gammeran. There, in the Wright Room, we planned a new Architecture. We would map the *Alpha-Probis Star Cluster* employing mathematics found in the Great Pyramid at Giza. We thought it a wondrous coincidence that at that very moment, the *Museum of Natural History* in Chicago was exhibiting, “*Ancient Egypt.*”



During a toast, I told the story I am now setting to ink.

As midnight rolled in, we celebrated my brother Robert's birthday. On the **23rd**, I completed 50 years and began my 51st year. The beginning of the 2nd one-half Century.

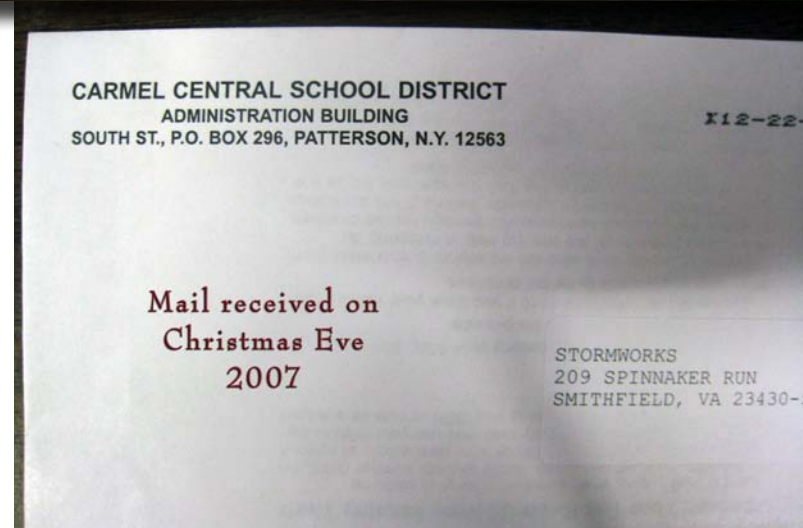
I journeyed home on a flight through Atlanta and photographed the sunset from seat **#3**.

On the 24th we lived through another somewhat saddened Christmas Eve... and then our *second* Christmas without our Mom. It was a Christmas that had been thrown into the Universe some **13.7 billion or so years ago**. She, *Carmel* was now a part of that Timeless toss. She smiled *from...* and *with* the Stars. All was as it should be... as indeed it always was and is and will be.

Epilogue:

Through work on a recent joint astronomical-educational project, I met a producer from PBS named Michelle. Michelle was born on **20 December**. She was in a terrible car accident that took her brother's life and left her without any memory prior to her **13th** birthday, the day of the accident.

On **20 December 2007**, the one year anniversary of our Mother's funeral, Michelle told me of a church that had been burned down in a neighboring town. On the **23rd**, a new steeple went up on another church just 3 blocks away from the church which had fallen. This may seem an inconsequential coincidence, but there is more.





On that same **23rd**, *yet another* steeple had gone up at Saint Eleanor's, *another* church in the area! What is it about the **23rd**? I thought. Is this a day when new steeples go up? The internet might help. As you can see, this has happened before! Strange. Strange? Past. Present. Future. United in the oneness of our infinite Universe.

On the **23rd of December**, *my* birthday, the *World Trade Center* was completed, and on **11 September 2001**, *Lancer's* Birthday, those buildings came down. On the **20th of December**, a 13-year-old girl lost her memory and was *born*, our Mom was *buried*, and a church was *burned down*... and just 3 blocks away a *new* steeple went up on the 23rd, a *birthday*.

And how did Michelle learn about the time and the date of the new steeple being placed?

It was told to her by a passer-by. The woman was a nun.

A nun named *Sister Carmel*.



