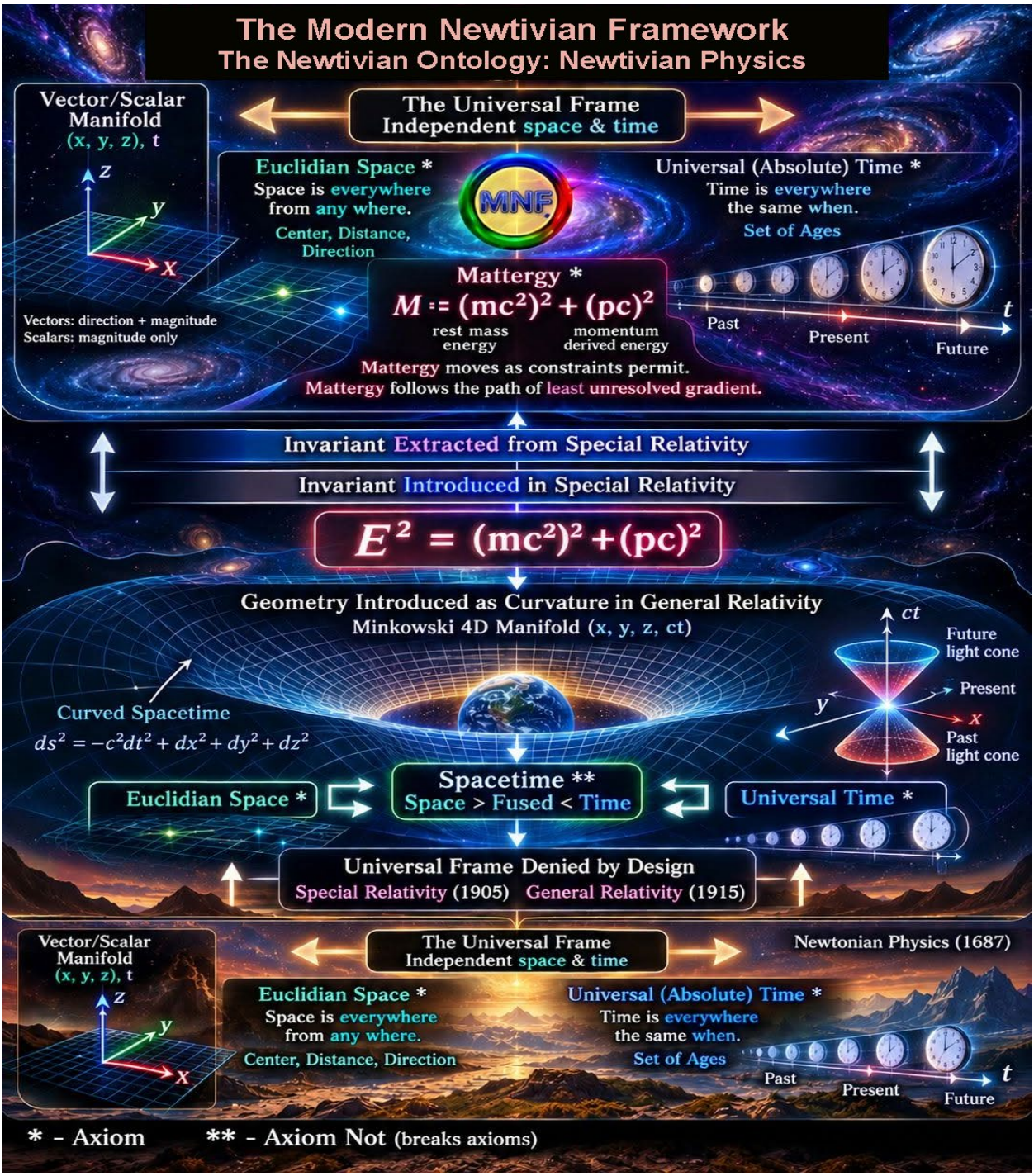
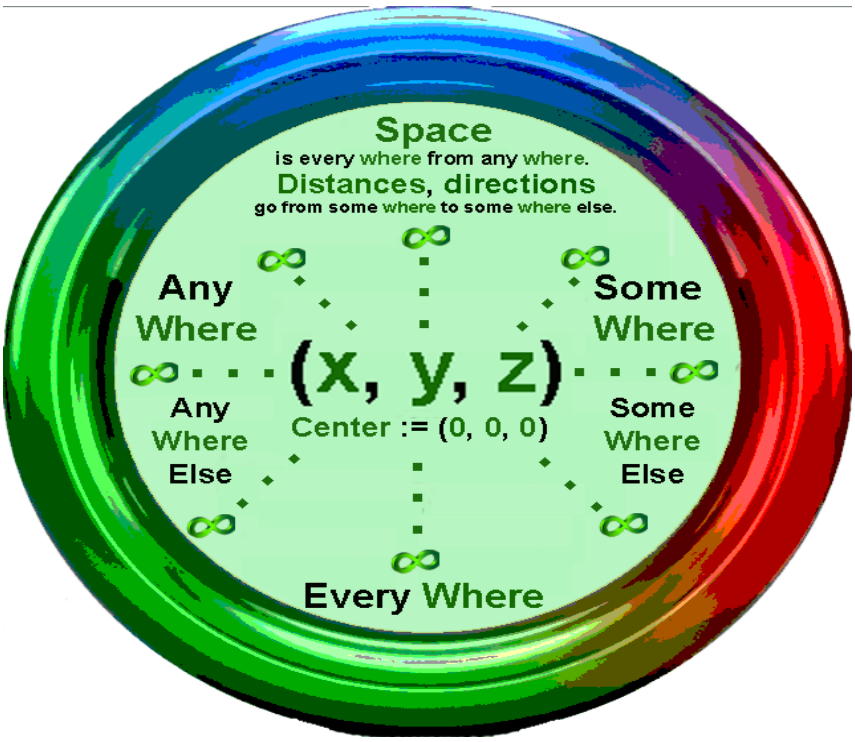
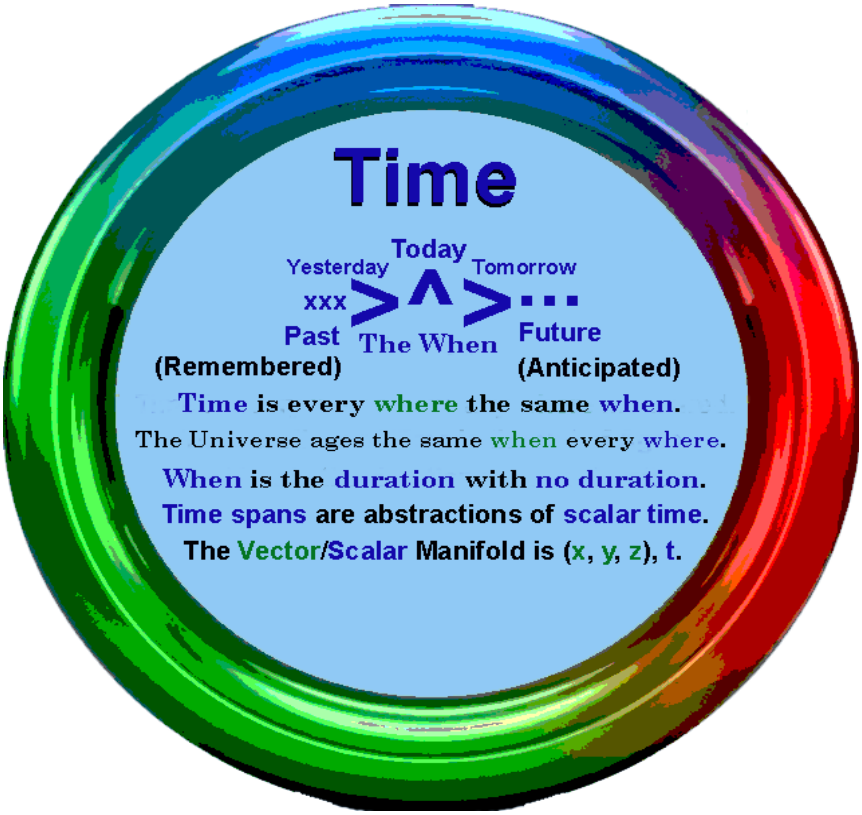
The Inescapable Center of The Universe - The Geometric Consequence of an Expanding Singularity

By Craig M. Seavey



The Axioms of Space and Time





The ***Axiom of Space -- Space is every where from any where.*** *The axiom of space establishes that the Universe is every where, infinite potential distance in every direction. Euclidian space is isotropic and homogenous. From any where, every where is the same.*

The ***Axiom of Time -- Time is every where the same when.*** *The axiom of time establishes that the Universe is every where the same universal when. The age of The Universe is a scalar age. Every where the same when establishes a universal accumulated magnitude, a growing scalar (the system) from which all other durations (in subsystems) derive. All ages track along with this one grand scalar, the magnitude that is the age of The Universe.*

Relating time to space: **Euclidian Space -- Universal Time**

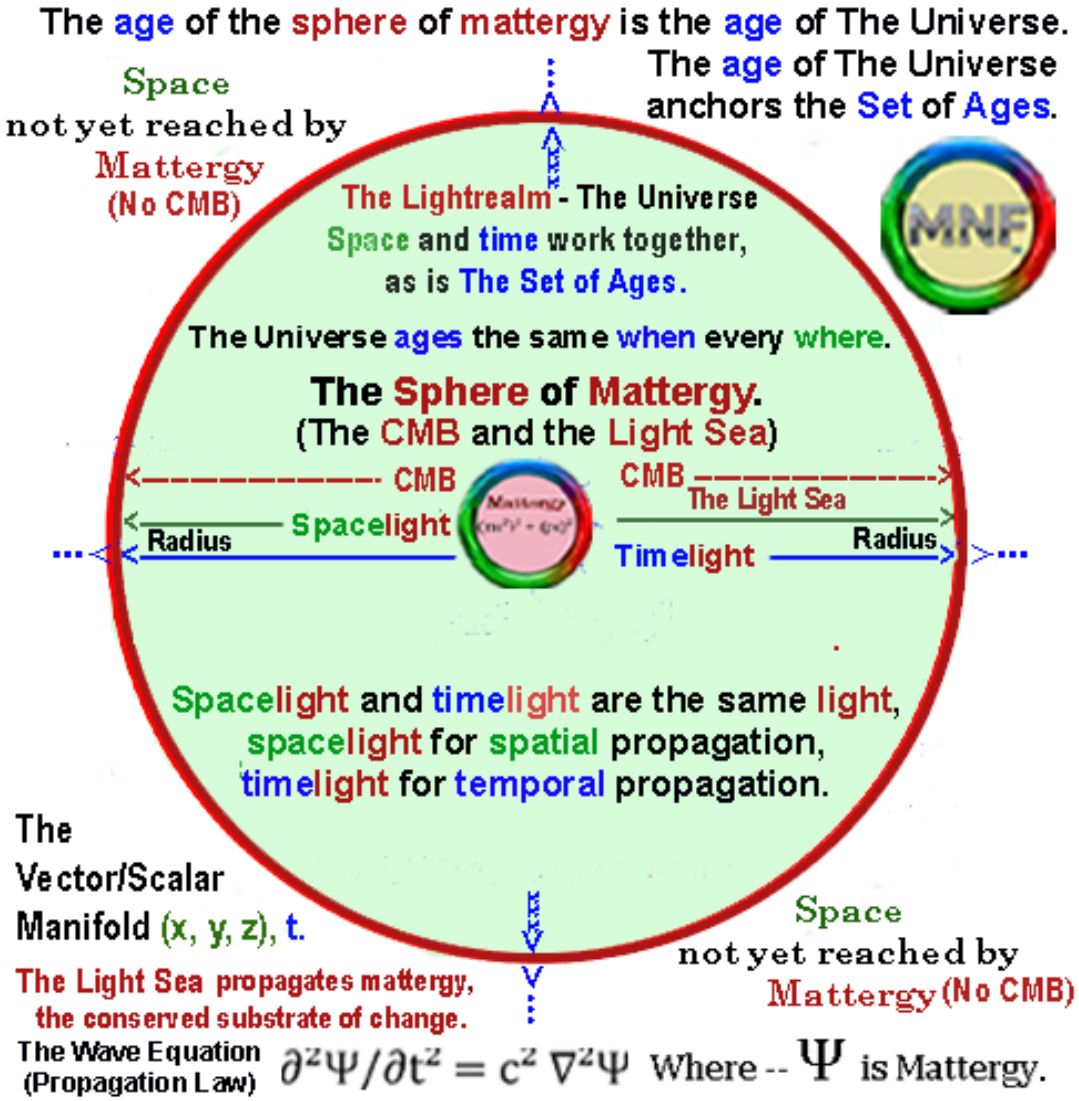
The **when** is every **where** the exact same **when**. The age of The Universe is **when** to **when**, one **when** to the next, an additive accumulated duration. The first **when** begins the **Great Expansion.** The current age of The Universe is from then to when? To this very day, today. We keep the abstractions -- recorded/remembered history (yesterday), Today (We're all in it). Tomorrow follows today – the future anticipated. Don't worry. Wait for it.

Durations go from some **when** to a later **when:**

Timespans begin at a particular **when**, end at some later **when**. Timespans are always abstractions — never directly physical. Timespans exist as experience: a second, a minute, an hour, a day, a lifetime. The Universe experiences years in that same sense. 13. 8 billion years currently. Timespans are measured from **when** to **when**, yes, but lived through as well.

- Timespans are measured durations as a sequence of continuous when.
- Time flows now to future wherever and whenever experienced.
- Time is both measured and experienced. These are separate things.
- **The experience of time is always here and now, however measured.**
- Time is *lived through experience. Timespans are kept as abstractions*.

The Singularity – A Sphere: Day One to Present Day



Space is every **where** from any **where**.
Time is every **where** the same **when**.
When is the **duration** with **no duration** - **xxx>^>...**
Mattergy := $(mc^2)^2 + (pc)^2$. **Mattergy matters.**
Mattergy moves as **constraints** permit,
follows the path of least unresolved **gradient**.

Modern Newtivian Framework

The Friedmann Cosmic Sphere

Expansion Rate Equation

$$(\dot{a} / a)^2 = Aq\,\rho + C$$

- $(\dot{a} / a)^2$: Expansion Rate
- Aq: Universal Acceleration Constant
- ρ: Density
- C: Expansion Floor Constant

a is the scale factor.

$\dot{a}$ is the rate of change.

Expansion Acceleration Equation

$$\ddot{a} / a = -\tfrac{1}{2}\,Aq\,(p + 3p / c^2)$$

- $\ddot{a} / a$: Acceleration Rate
- Aq: Universal Acceleration Constant
- p: Pressure
- c^2: Speed of Light Squared

a is the scale factor.

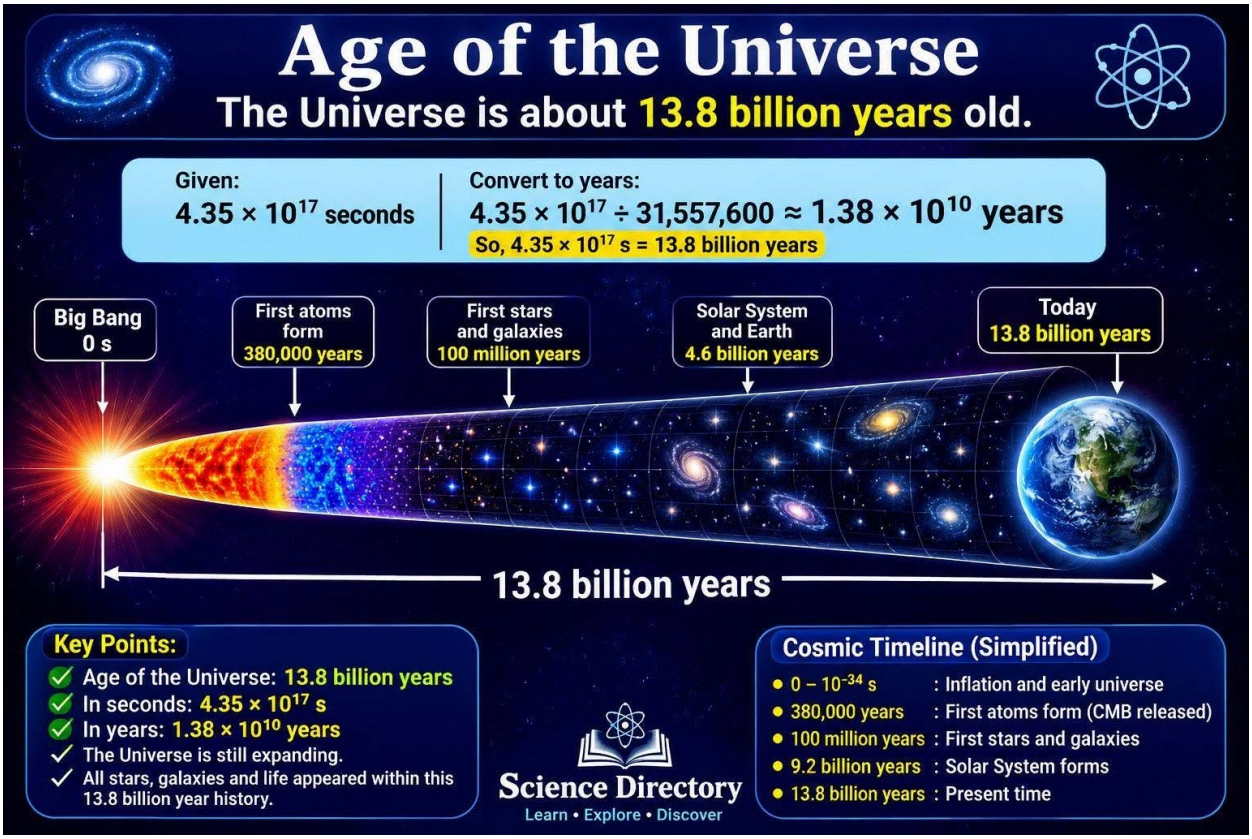
$\ddot{a}$ is the rate of change.

The Friedmann equations are crucial to modern cosmology. They build comoving distance from a sphere in expanding Euclidean space.

No direction is privileged. The geometry must be spherically symmetric. The equations run backward in scalar time toward the Great Expansion and forward in scalar time to age and size the Universe.

Scalar time runs backward toward the Great Expansion –
Today >> Yesterday >> back 13.8 billion years >> at the GE.
Forward from the GE >> Yesterday >> Today >> Tomorrow >> ...

The Corollary – The Set of Ages



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*The **Set of Ages** is an inclusive set of all empirical or abstract durations, from the smallest—the first **Tiny Time**—to the largest, **the Age of the Universe** itself. Every age is a duration that parallels the single scalar magnitude that is the age of The Universe.*

The ***Axiom of Time -- Time is every where the same when. --*** *produces a magnitude that behaves in a single, immutable way for all things. This is self-evident: we experience time as a uniform increase in age. My age is a magnitude. Your age is a magnitude. The age of everything that ages is an accumulation of magnitude established by the magnitude that is the age of The Universe.*

Concerning Boundary: *The Set of Ages.* *(the set of t).*

The Set of Ages is the cardinality of Tiny Time durations since the first such t.

Let T_when be equal to N multiples of the Tiny Time:

***Then T is* an inclusive, well-ordered set:** $T = \{ t_1, t_2, t_3, \ldots , t_N \}$

The largest duration in *The Set of Ages* is *The Age of The Universe*.

***The age of the Universe is a simple scalar. Tiny Time is the smallest unit-measure*.**

The Universe is as old as the 1st Tiny Time to today's current when.

The Set of Ages manifests that magnitude properly true

To Prove: The Universe has a center, always so, never not.

Glyphs – Sphere of Mattergy ; Friedmann Cosmic Sphere

- **Given 1: The Axiom of Space, Euclidian Space.**
  Space is every where from any where.
  Space is infinite potential distance in every direction.
  Space is isotropic. Space is homogenous.
- **Given 2: The Axiom of Time, Universal Time.**
  Time is every where the same when.
  Timespans are durations between events,
  before, then, after, accorded any proper unit-measure.
  Earlier When, The Event, Later When.
- **Given 3: The Vector/Scalar Manifold (x, y, z), t.**
- **Given 4: The Universe began as an event at a location.**
- **Given 5: The Universe ages as yesterday, today, tomorrow from the first day to today, another day older tomorrow. (The Set of Ages)**
- **Given 6: The Great Expansion began as a singularity within.**
- **Given 7: The singularity expanded in Euclidian 3-space (x, y, z).**
- **Given 8: The singularity expanded in no privileged direction, moving as constraints permit, following the path of least unresolved gradient.**

Therefore the singularity propagated from a point that could have been any where, must have been some where expanded distance over time in Euclidian space (x, y, z), infinite potential distance in every direction.

The Sphere of Mattergy, the Friedmann Cosmic Sphere.

Proved. The Center of The Universe is (0, 0, 0), the initial singularity.